Order No. ACED061209C8

Service Manual

AUTOMOTIVE AFTERMARKET

CQ-C1465N

Removable Front Panel CD Player / Receiver

Specifications*

General	
Power Supply	DC 12V (11V - 16V),
	Test Voltage 14.4V
	Negative Ground
Tone Controls	Bass ; ±12dB at 100Hz
	Treble ; ±12dB at 10kHz
Current Consumption	Less than 2.2A (CD play mode, 0.5W×4ch)
Maximum Power Output	50W×4ch (at 1kHz, Vol. Max.)
Suitable Speaker Impedance	4-8Ω
Pre-Amp Output Voltage	2.5V (CD play mode; 1kHz, 0dB)
Output Impedance	200Ω
FM Stereo Radio	
Frequency Range	87.5 - 108MHz
Usable Sensitivity	11.0dBf (1.25µV, 75Ω)
AM Radio	
Frequency Range	531 - 1,602kHz
LW Radio	
Frequency Range	153 - 279kHz
Usable Sensitivity	28dB/µV (25µV, S/N 20dB)
RDS	
RDS Senstivity	22dB/µV
CD Player	
Sampling Frequency	8 times oversampling
Pick-Up Type	Astigma 3-beam
Light Source	Semiconductor Laser
Wavelength	780nm
Frequency Response	20Hz to 20,000Hz (±1dB)
Signal to Noise Ratio	96dB
Dimensions**	178×50×155mm
Weight**	1.4kg

* Specifications and the design are subject to possible modification without notice due to improvements.

** Dimensions and Weight shown are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Panasonic

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1 ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution :

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 700 ± 20°F (370 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C)
- This lead free solder will be used for the products after serial No. 1,000,001.

2 FEATUERS

- Remote Control.
- 18-FM, 6-AM presets with preset scan
- Digital servo for reliable CD playback.
- Removable face plate.

3 LASER PRODUCTS

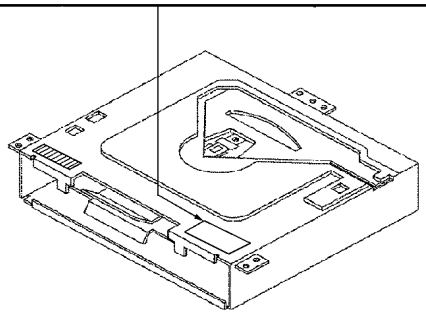
CAUTION:

This product utilizes a laser diode with the unit turned "on", laser radiation is emitted from the pickup lens.

Laser radiation from the pickup lens is safety level, but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

DANGER! Invisible laser radiation when open. Avoid direct exposure to beam.



Deck Ass'y (Upper Side)

Caution
This Product utilizes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

4 REPLACEING THE FUSE

Use fuses of the same specified rating (15A). Using different substitutes or fuses with higher ratings, or connecting the product directly without a fuse, could cause fire or damage to the stereo unit.

5 MAINTENANCE

Your products is designed and manufactured to ensure a minimum of maintenance. Use a dry, a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.

6 NOTES

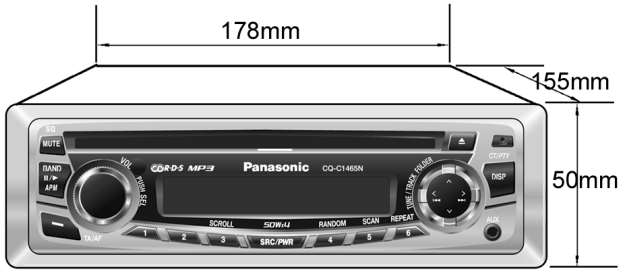
[RADIO BLOCK]

Do not align the AM/FM package block. When the package block is necessary, it will be supplied already aligned at the factory.

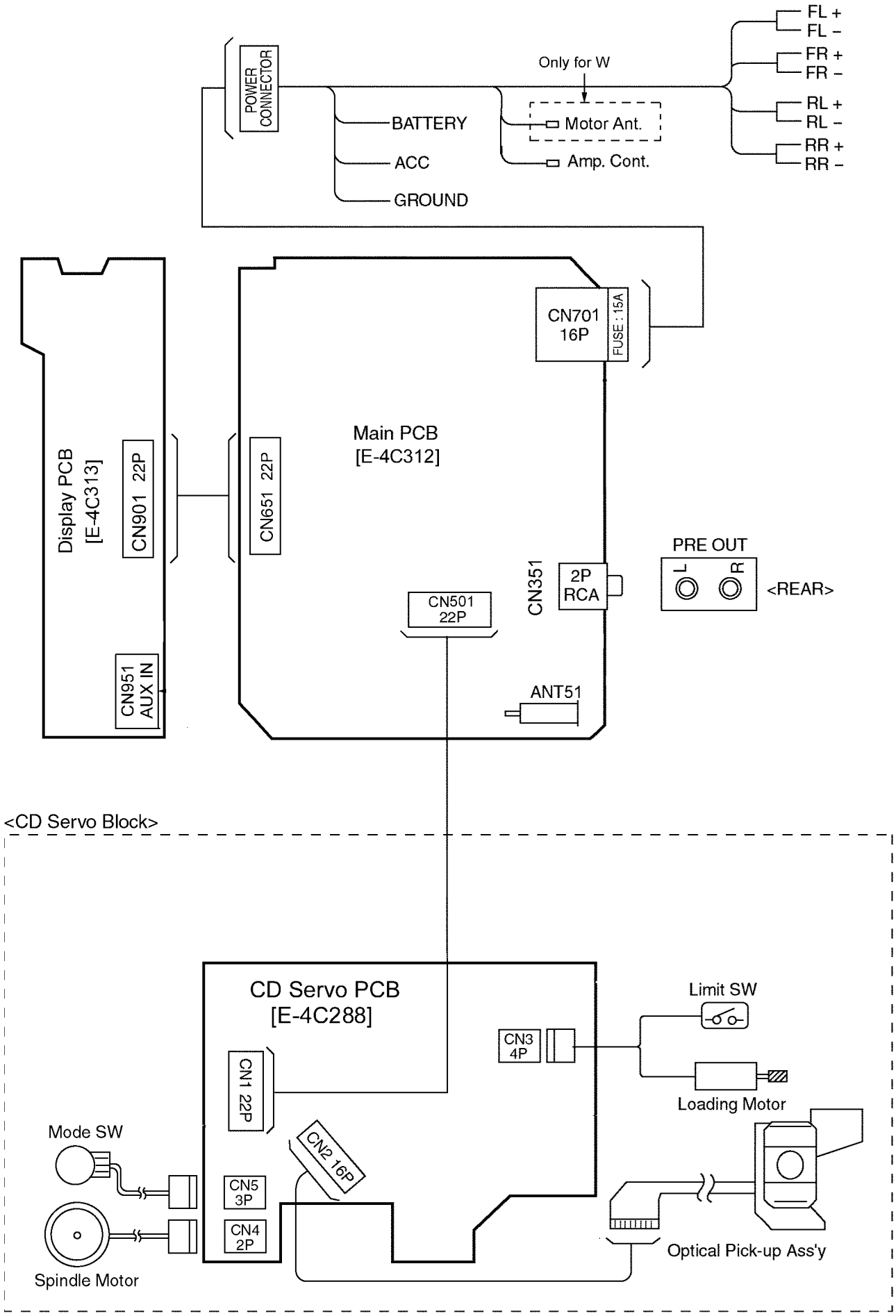
[CD DECK BLOCK]

This model has no servo alignment points because microcomputer controls the servo circuit.

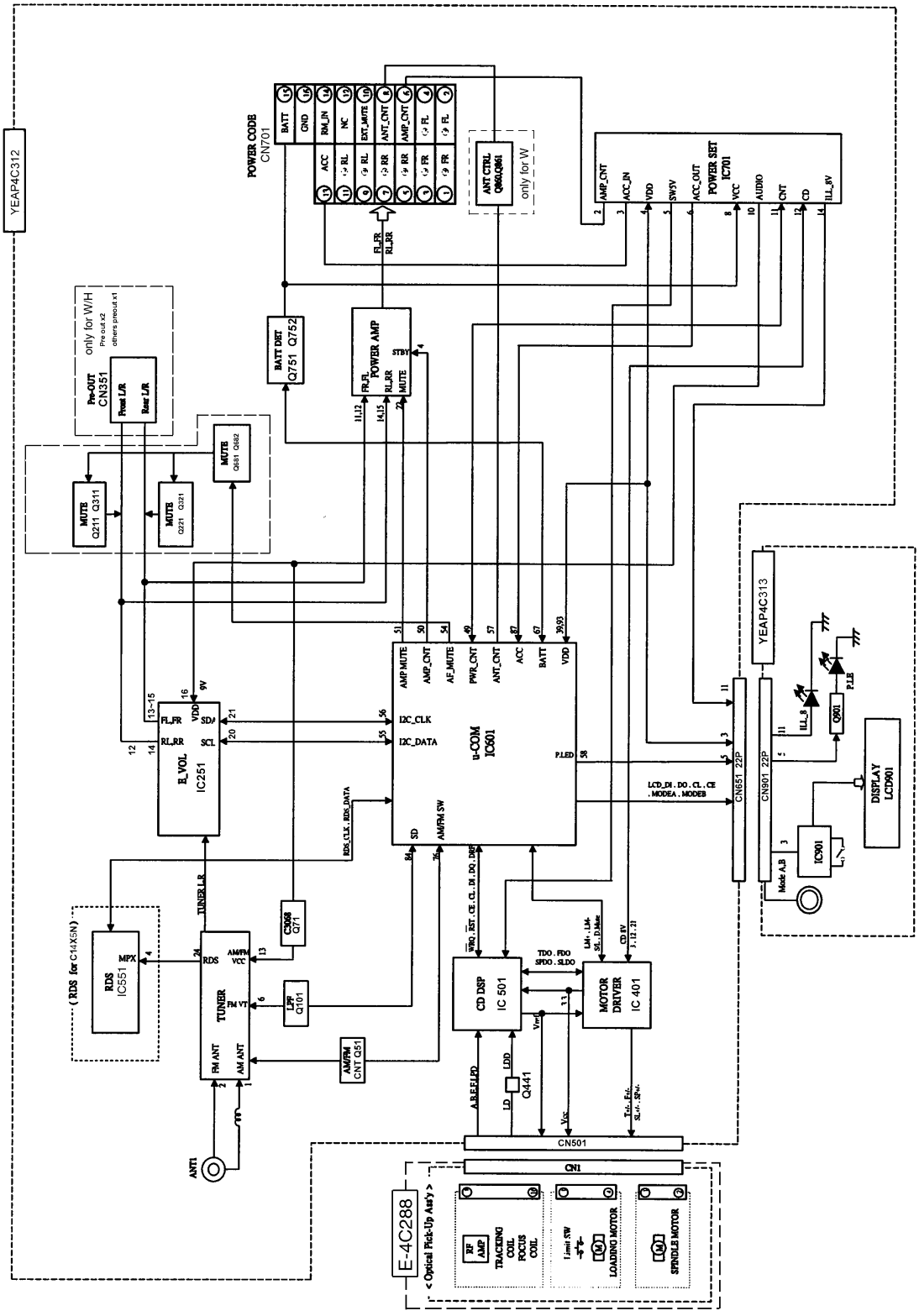
7 DIMENSIONS



8 WIRING CONNECTION



9 BLOCK DIAGRAM



10 TERMINALS DESCRIPTION

10.1. Main Block

IC601 : LC7237849D41

Ref. No.	Part No.	Part Name & Description	I/O	FM(V)	AM(V)	CD(V)
1	XIN	4. 5 MHz X'tal and Connection	I	2.52	2.54	2.53
2	TEST2	GND connection	I	0	0	0
3	VREG	Bypass condenser connected.	O	2.94	2.95	2.95
4	VSSCPU	GND connection	-	0	0	0
5	CDC_DATA	CD changer data	I	0	0	0
6	N.C.	None	-	-	-	-
7	CDC_CLK	CD changer clock	I	0	0	0
8	CDC_REM_OUT	CD changer Remote out	O	0	0	0
9	LCD_DO	LCD data output	I	5.2	5.21	5.21
10	LCD_DI	LCD data input	O	5.01	5.04	5.01
11	LCD_CLK	LCD clock	O	5.14	5.16	5.16
12	LCD_CE	LCD chip enable output	O	0.17	0.17	0.17
13	CD_DO	CD data output	I	5.36	5.38	3.9
14	CD_DI	CD data input	O	0	0	4.74
15	CD_CLK	CD clock	O	4.96	4.98	4.96
16	CD_CE	CD chip enable	O	0	0	1.57
17	CD_EM	CD eject	O	0	0	0
18	CD_LM	CD loading	O	0	0	0
19	CD_S/L	CD 24PIN connection	O	0	0	5.19
20	SUB_RDY	CD INTB1 connection	I	0.12	0.1	5.22
21	CD_INSW1	CD insert SW input	I	0.1	0.1	0.1
22	CD_SW2	CD MECHA SW2	I	5.15	5.7	0.1
23	CD_LIMIT_SW	CD limit SW	I	0	0	5.17
24	CD_DRF	CD Mute	I	5.33	5.35	5.35
25	CD_RST	CD reset	O	0	0	5.13
26	CD_BATT	CD_BATT	O	0	0	5.18
27	N.C.	None	O	5.17	5.19	5.19
28	N.C.	None	O	0	0	0
29	PANEL	Panel detect	I	5.21	5.22	5.22
30	N.C.	GND connection	I	0	0	0
31	N.C.	GND connection	I	0	0	0
32	N.C.	GND connection	I	0	0	0
33	N.C.	None	-	-	-	-
34	N.C.	None	-	-	-	-
35	N.C.	None	-	-	-	-
36	N.C.	None	-	-	-	-
37	N.C.	None	-	-	-	-
38	N.C.	None	-	-	-	-
39	VDDPORT	Power supply of PORT	-	5.17	5.19	5.19
40	VSSPORT	GND of PORT	-	0	0	0
41	N.C.	None	-	-	-	-
42	N.C.	None	-	-	-	-
43	N.C.	None	-	-	-	-
44	N.C.	None	-	-	-	-
45	N.C.	None	-	-	-	-
46	N.C.	None	-	-	-	-
47	N.C.	None	-	-	-	-
48	N.C.	None	-	-	-	-
49	PWR_CNT	Power control	O	5.15	5.17	5.17
50	AMP_CNT	Amp stand-by	O	5.15	5.17	5.17
51	AMP_MUTE	Amp mute	O	5.17	5.19	5.19
52	N.C.	None	-	-	-	-
53	SSC	Tuner search sensitivity change	O	0	0	0
54	AF_MUTE	AF mute	O	5.17	5.19	5.19
55	I2C_DATA	Electronic VOL data	O	5.17	5.19	5.19
56	I2C_CLK	Electronic VOL clock	O	5.17	5.19	5.19
57	ANT_CNT	Motor antena control	O	5.17	5.19	0
58	POWER_LED	Power LED	O	0.15	0.16	0.13
59	N.C.	None	-	-	-	-
60	N.C. (BZ_OUT)	None	-	-	-	-
61	N.C.	None	-	-	-	-
62	N.C.	None	-	-	-	-
63	N.C.	None	-	-	-	-
64	N.C.	None	-	-	-	-
65	N.C.	None	-	-	-	-
66	TEL_MUTE	External MUTE input	I	0	0	0
67	BATT	Battery detection	I	5.19	5.2	5.2
68	MODE_B	ROTARY B input	I	5.1	5.17	5.17
69	RDS_CLK	RDS clock	I	0	0	0
70	REM_IN	Remocon data input	I	5.12	5.14	5.12
71	MODE_A	ROTARY A input	I	5.16	5.17	5.16
72	CDC_STB	CD changer strobe input	I	0	0	0
73	NC	None	-	-	-	-
74	MONO	Compulsion MONO ON	O	0	0	0
75	AM_MODE	AM change	O	8.19	0.13	8.24
76	FM_MODE	FM change	O	0.13	8.18	8.24
77	N.C.	GND connection	I	0	0	0
78	INIT_C	Initial value C	I	0	0	0
79	INIT_B	Initial value B	I	5.15	5.17	5.17
80	INIT_A	Initial value A	I	1.93	1.94	1.94
81	VSSADC	GND connection	-	0	0	0
82	RDS_DATA	RDS data	I	0	0	0
83	ST	FM stereo input	I	5.37	5.38	5.39
84	SD_FM/AM	Signal detection	I	3.3	3.28	0
85	N.C.	GND connection	I	0	0	0
86	RESET	Reset Input	I	5.2(PWR OFF)	5.2(PWR OFF)	5.2(EJECT)
87	ACC	Power supply	I	5.4	5.4	5.41
88	N.C.	GND connection	I	0	0	0
89	N.C.	GND connection	I	0	0	0
90	FM/AM_IFC	FM/AM IF input	I	1.46	1.47	0
91	N.C.	GND connection	I	0	0	0
92	SUBPD	None	O	0	0	0
93	VDDPLL	Power supply of PLL	-	5.18	5.19	5.2
94	N.C.	None	I	0	0	0
95	OSC_FM/AM	FM/AM osc input	I	1.46	1.39	0
96	VSSPLL	None	-	0	0	0
97	N.C.	None	-	-	-	-
98	EO1	PLL phase comparison error output	O	1.93	2.02	0
99	TEST1	GND connection	I	0	0	0
100	XOUT	4. 5 MHz X'tal and Connection	O	2.62	2.63	2.63

Note 1 :

Voltage measuerments are with respect to ground, with a voltmeter (internal resistance : 10M ohms).

IC501:YEAMLC78691N

Ref. No.	Part No.	Part Name & Description	I/O	(V)
1	EFMIN	RF signal input port.	I	1.58
2	RFOUT	RF signal output port.	O	1.67
3	LPF	LPF capacitor connection port for RF signal DC level detection.	O	1.64
4	PHLPF	LPF capacitor connection port for detection.	O	1.68
5	AIN	A signal input port.	I	1.66
6	CIN	C signal input port.	I	1.66
7	BIN	B signal input port.	I	1.66
8	DIN	D signal input port.	I	1.66
9	FEC	LPF capacitor connection port for FE signal.	O	1.6
10	RFMON	LSI build-in analog signal monitor port.	O	1.64
11	VREF	VREF voltage output port.	O	1.66
12	JITTC	Capacitor connection port for JIT detection.	O	0

Ref. No.	Part No.	Part Name & Description	I/O	(V)
13	EIN	E signal input port.	I	1.65
14	FIN	F signal input port.	I	1.66
15	TEC	LPF capacitor connection port for TE signal.	O	1.57
16	TE	TE signal output port.	O	1.57
17	TEIN	TE signal input port for TES.	I	1.65
18	LDD	Laser power control output port.	O	3.27
19	LDS	Laser power detection input port.	I	0
20	AVSS	GND for analog.	-	0
21	AVDD	VDD for analog.	-	3.27
22	FDO	Focus control signal output port. D/A output.	O	1.65
23	TDO	Tracking control signal output port. D/A output.	O	1.65
24	SLDO	Thread control signal output port. D/A output.	O	1.64
25	SPDO	Spindle control signal output port. D/A output.	O	1.64
26	VVSS1	GND for build-in VCO.	-	0
27	PDOUT1	Phase comparison output port1 for build-in VCO control.	O	0
28	PDOUT0	Phase comparison output port0 for build-in VCO control.	O	0
29	PCKIST	PDOUT0 1 output port for current setting.	I	1.07
30	VVDD1	VDD for VCO.	-	3.29
31	DMUTEB	DMUTEB (general) output port.	-	-
32	PUIN	PUIN (general) I/O port. (With built-in Pull-Up resistance. Turning off when reset)	I/O	0
33	DEFFCT	Detection signal output port.	O	0
34	FSEQ	Synchronous signal output port. It becomes ¡§H” when Synchronous Idle detected from the EFM signal is corresponding to Synchronous Idle of internal generation.	O	0
35	C2F	C2 error signal output port.	O	0
36	DVDD	VDD for Digital.	-	3.29
37	DVSS	GND forDigital.	-	0
38	DVDD18	VDD capacitor connection port for digital circuit.	O	1.83
39	MONI0	Monitor port0.	O	0
40	MONI1	Monitor port1.	O	0
41	DVDD	VDD for Digital.	-	3.25
42	DVSS	GND forDigital.	-	0
43	CE	Host IF: Communication enable signal input port.	I	0
44	CL	Host IF: Data transfer clock input port.	I	3.56
45	DI	Host IF: Data input port.	I	0
46	DO	Host IF: Data output port (Nch output) Pull-Up is necessary.	O	5.32
47	RESB	Reset input port. Make it L” when power ON.	I	0
48	INTB	Interrupt signal output port. (Servo)	-	-
49	SUB_READY0	For host u-com IF: SUB-RDY output. (Nch and Pull-Up resistance is necessary)	O	0
50	CD_MUTEO	General I/O port2. (With built-in Pull-Up resistance. Turning off when reset)	I/O	5.31
51	LOW_BATI	General I/O port1	I/O	5.16
52	CONT	General I/O port0	I/O	0
53	OSCCNT	OSCOFF control port . Connected with 0V when Reset.	I	0
54	STREQ	Stream data demand signal output port.	I/O	0
55	STCK	Clock input port for stream data.	I/O	0
56	STDATA	Stream data input port.	I/O	0
57	TEST1	Inputport for test. Needed connect with 0V1	I	0
58	DATA	Lch/Rch data output port.	-	-
59	DATACK	Clock output port.	-	-
60	LRSY	Lch/Rch clock output port	-	-
61	VVDD2	VDD for build-in VCO.	-	3.25

Ref. No.	Part No.	Part Name & Description	I/O	(V)
62	VPREF2	Built-in VCO oscillation cooking stove setting input terminal.	I	3.25
63	VCOC2	Built-in VCO control voltage setting input port.	I	1.08
64	VPDOUT2	Output port for built-in VCO control.	O	0.08
65	VVSS2	GNDfor building VCO. Needed connect with 0V.	-	0
66	DVDD18	VDD capacitor connection port for digital circuit.	O	1.84
67	DVSS	GND for Digital system. Needed connect with 0V.	-	0
68	DVDD	VDD for Digital system.	-	3.25
69	DOUT	Digital OUT output port. EIAJ format.	-	-
70	AMUTEB	AMUTEB (general) output port.	-	-
71	XVSS	GND for oscillation circuit. Needed connect with 0V.	-	0
72	XOUT	Connected of 16.9344MHz oscillation.	O	1.39
73	XIN	Connected of 16.9345MHz oscillation.	I	1.35
74	XVDD	VDD forOscillation circuit.	-	3.19
75	LCHO	L channel output port.	O	0
76	LRVDD	VDD for LR channel.	-	3.21
77	LRVSS	GND for LR channel. Needed connect with 0V.	-	0
78	RCHO	R channel output port.	O	0
79	AVDD	VDD for analog .	-	3.27
80	SLCO	Slice level control output port.	O	1.6

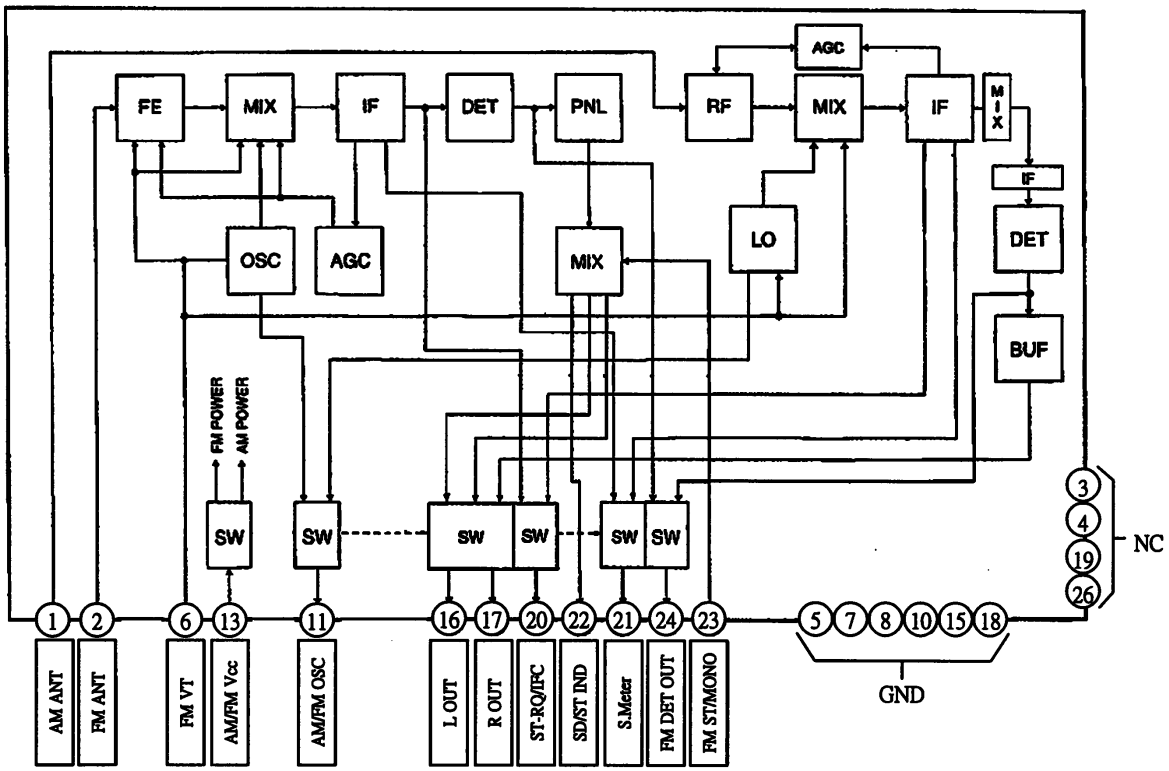
10.2. Display Block

IC901 : C0HBA0000223

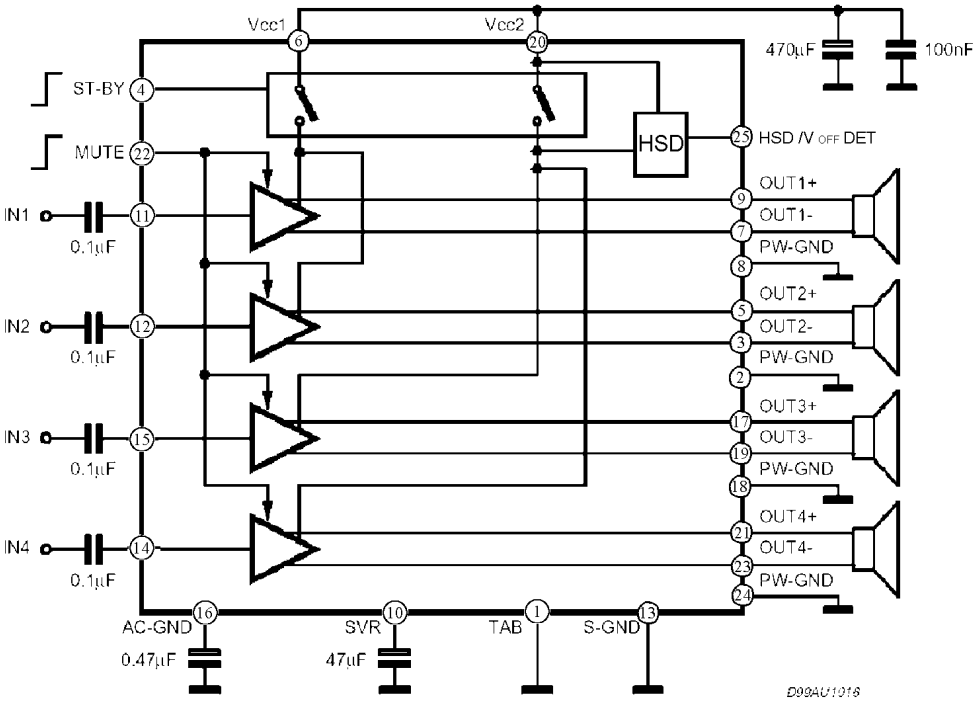
Pin No.	Port	Descriptions	I/O (V)	(V)
1	-	-	-	-
2-4	NC	No connection	-	-
5-39	S1-35	LCD segment	O	2.5
40-43	C1-4	LCD common	O	2.5
44-49	KS1-6	Key data output	O	0.9
50-54	KI1-5	Key data input	I	0
55	TEST	(Connecting to ground)	-	0
56	VDD	+5V power supply	-	5.1
57	VDD1	Ground through capacitor	-	3.3
58	VDD2	Ground through capacitor	-	1.7
59	Vss	Ground	-	0
60	OSC	CR oscillator	-	3.9
61	DO	Key data output	O	4.4
62	CE	Chip enable	I	0
63	CLK	LCD clock	I	0
64	DI	LCD data input	I	0

11 PACKAGE AND IC BLOCK DIAGRAM

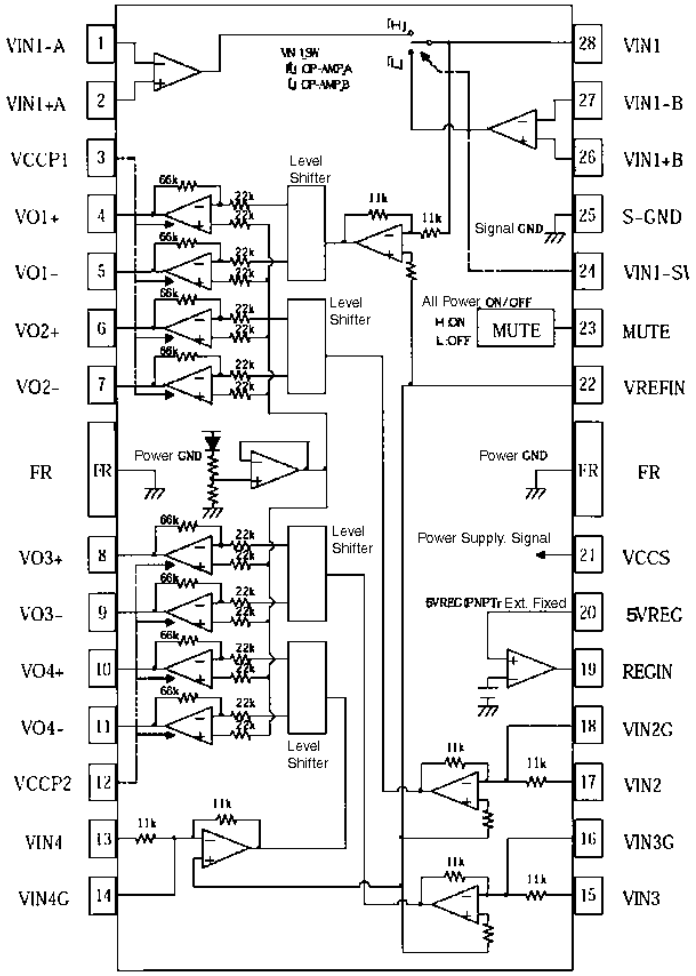
11.1. Main Block



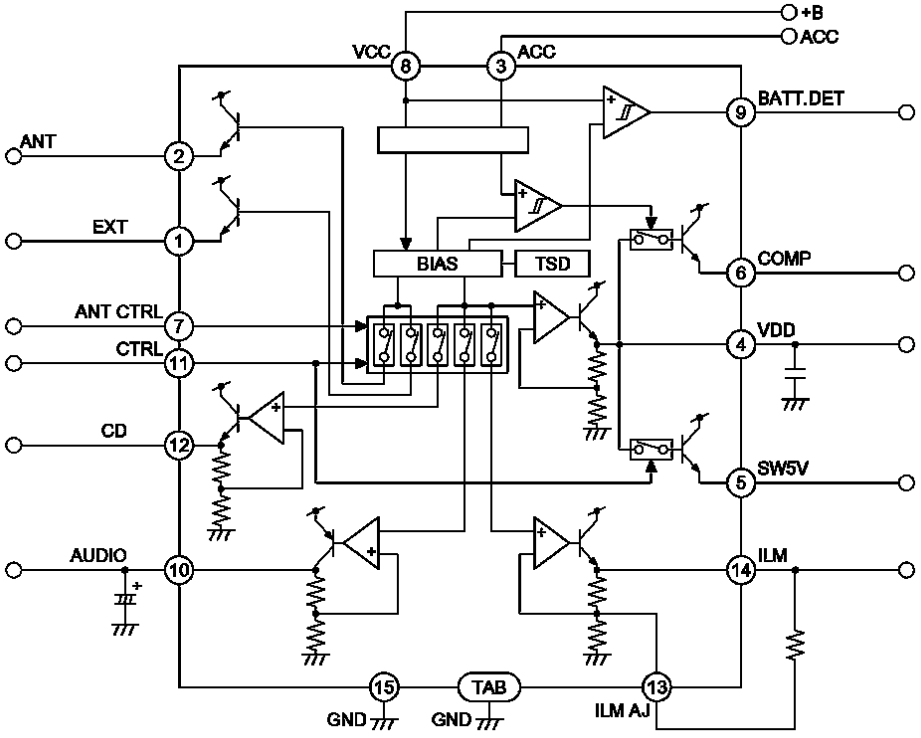
PA51:J3CCBC000010



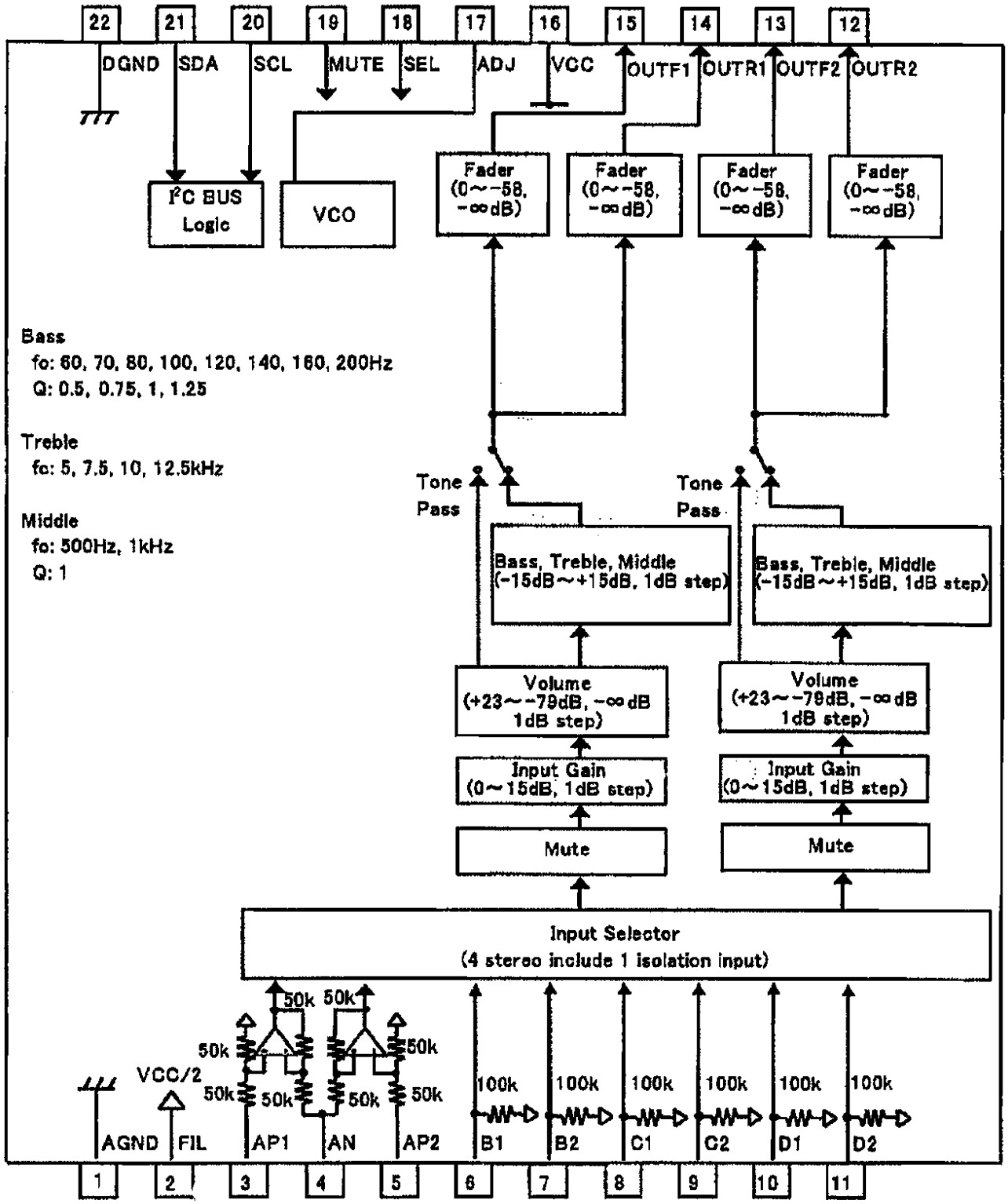
IC271 : C1EA00000041



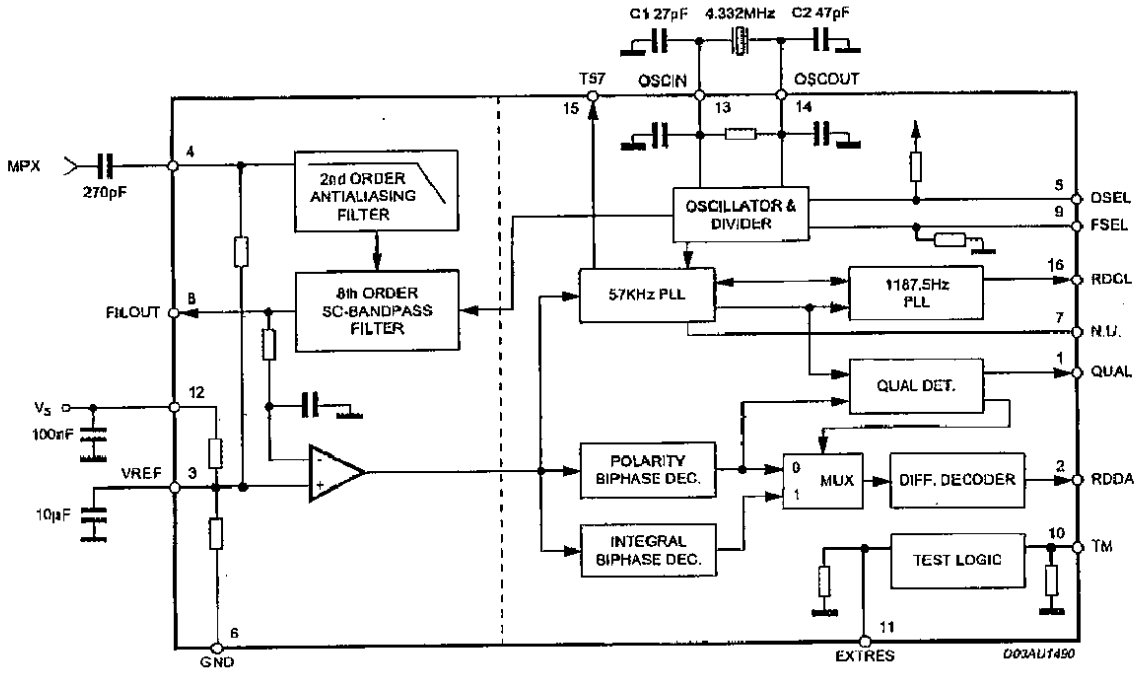
IC401 : C1BB00001088



IC701 : C0DAZHF00004



IC251 : C1BB00000804



IC551 : C1BB00000960

12 REPLACEMENT PARTS LIST

Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safty notice: Component , indentified by ⚠ mark have special characteristics important for safety. when replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing. as in a load map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. Aft the end of this period, the assembly will no longer be available.
5. "T" marks in remarks colum are indicated supply parts of PTW.

▪ Order intake period is basically six months after the first shipment

Ref. No.	Part No.	Part Name & Description	Remarks
1. IC's and Transistors			
MAIN BLOCK [E-4C312]			
IC251	C1BB00000804	IC	T
IC271	C1EA00000041	IC	T
IC401	C1BB00001088	IC	T
IC501	YEAMLC78691N	IC	T
IC551	C1BB00000960	IC	T
IC601	LC7237849D41	IC	T
IC701	C0DAZHF00004	IC	T
PA51	J3CCBC000010	Tuner	T
Q51	B1GDCFEH0001	Transistor	T
Q52	B1GDCFEH0001	Transistor	T
Q53	B1GBCFJJ0002	Transistor	T
Q71	B1AAEC000002	Transistor	T
Q101	B1CAHF000003	Transistor	T
Q211	B1GBCFGA0023	Transistor	T
Q221	B1GBCFGA0023	Transistor	T
Q311	B1GBCFGA0023	Transistor	T
Q321	B1GBCFGA0023	Transistor	T
Q441	YEAN2SA1317T	Transistor	T
Q471	B1BCCF000013	Transistor	T
Q681	B1GDCFNN0002	Transistor	T
Q682	B1GDCFNN0002	Transistor	T
Q751	B1GDCFNN0002	Transistor	T
Q752	B1GBCFCJ0005	Transistor	T
DISPLAY BLOCK [E-4C313]			
IC901	C0HBA0000223	IC	T
IC902	B3RAB0000030	IC	T
Q901	B1GDCFJJ0047	Transistor	T
2. Diodes			
MAIN BLOCK [E-4C312]			
D251	YEADMTZJ56CT	Zener Diode	T
D601	B0ACCK000005	Diode	T
D602	B0ACCK000005	Diode	T
D651	B0ACCK000005	Diode	T
D652	B0ACCK000005	Diode	T
D701	B0EAMM000058	Silcon Diode	T
D702	B0ECKE000002	Diode	T
D711	B0EAJP000001	Silcon Diode	T
D712	B0EAJP000001	Silcon Diode	T
D713	B0EAJP000001	Silcon Diode	T
D714	B0EAJP000001	Silcon Diode	T
D715	B0EAJP000001	Silcon Diode	T
D716	B0EAJP000001	Silcon Diode	T
D717	B0EAJP000001	Silcon Diode	T
D719	B0EAJP000001	Silcon Diode	T
D720	B0EAJP000001	Silcon Diode	T
D751	B0BC6R700006	Diode	T
D871	B0ACCK000005	Diode	T
DISPLAY BLOCK [E-4C313]			
D901	B3AEB0000088	LED(BLUE)	T
D902	YEAD19217R6C	LED (RED)	T
D903	YEAD19217R6C	LED (RED)	T
D905	YEAD19217R6C	LED (RED)	T
D906	YEAD19217R6C	LED (RED)	T
D907	YEAD19217R6C	LED (RED)	T
D908	YEAD19217R6C	LED (RED)	T
D909	YEAD19217R6C	LED (RED)	T
D910	YEAD19217R6C	LED (RED)	T
D911	YEAD19217R6C	LED (RED)	T
D912	YEAD19217R6C	LED (RED)	T
D913	YEAD19217R6C	LED (RED)	T
D951	B3AAB0000213	CHIP LED (WHITE)	T
D952	MAZ80560ML	Zener Diode	T
3. Capacitors			
MAIN BLOCK [E-4C312]			
C51	F1J1H470A732	Ceramic 47pF 50WV	T
C54	F2A1A101A354	Electrolytic 100pF 10WV	T
C55	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C56	F1J1H223A733	Chip 0.022MFD 50WV	T
C57	F1J1H123A733	Ceramic 0.012MFD 50WV	T
C60	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C61	F1J1H153A733	Ceramic 0.015MFD 50WV	T
C62	F1J1H153A733	Ceramic 0.015MFD 50WV	T
C71	F2A1A101A354	Electrolytic 100pF 10WV	T
C101	F1K1H682A116	Ceramic 6800pF 50WV	T
C103	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C104	ECQV1H683JL2	Plastic Film 0.068MFD 50WV	T
C105	F2A1A221A807	Electrolytic 220pF 10WV	T
C201	F1K1C105A070	Ceramic 1MFD 16WV	T
C202	F1J1C105A182	Ceramic 1MFD 16WV	T
C204	F2A1H1R0A407	Electrolytic 1pF 50WV	T
C205	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C208	F1J1H471A733	Ceramic 470pF 50WV	T
C209	F1J1H471A733	Ceramic 470pF 50WV	T
C211	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C212	ECQV1H224JL2	Plastic Film 0.22MFD 50WV	T
C213	F1J1H222A733	Chip 2200pF 50WV	T
C221	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C222	ECQV1H224JL2	Plastic Film 0.22MFD 50WV	T
C223	F1J1H222A733	Chip 2200pF 50WV	T
C224	F1J1H472A733	Ceramic 0.0047MFD 50WV	T
C251	F2A1C100A401	Electrolytic 10pF 16WV	T
C252	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C253	F2A1A221A807	Electrolytic 220pF 10WV	T
C254	F1J1H472A733	Ceramic 0.0047MFD 50WV	T
C271	F2A1H1R0A019	Electrolytic 1pF 16WV	T
C272	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C273	F2A1A101A023	Electrolytic 100pF 10WV	T
C274	F2A1H1R0A407	Electrolytic 1pF 50WV	T
C275	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C276	F2A1C100A401	Electrolytic 10pF 16WV	T
C301	F1K1C105A070	Ceramic 1MFD 16WV	T
C302	F1J1C105A182	Ceramic 1MFD 16WV	T
C304	F2A1H1R0A407	Electrolytic 1pF 50WV	T
C309	F1J1H471A733	Ceramic 470pF 50WV	T
C311	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C312	ECQV1H224JL2	Plastic Film 0.22MFD 50WV	T

Ref. No.	Part No.	Part Name & Description	Remarks
C313	F1J1H222A733	Chip 2200pF 50WV	T
C321	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C322	ECQV1H224JL2	Plastic Film 0.22MFD 50WV	T
C323	F1J1H222A733	Chip 2200pF 50WV	T
C324	F1J1H472A733	Ceramic 0.0047MFD 50WV	T
C401	F2A1A101A023	Electrolytic 100pF 10WV	T
C402	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C441	F2A0J330A406	Electrolytic 33pF 6.3WV	T
C443	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C444	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C445	F3F1D105A042	Ceramic 1MFD 20WV	T
C446	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C447	EEAFC0J560H	Electrolytic 56PF 6.3WV	T
C448	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C449	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C450	F2A0J101A020	Electrolytic 100pF 6.3WV	T
C451	F2A0J101A409	Electrolytic 100pF 6.3WV	T
C471	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C472	F2A1A101A354	Electrolytic 100pF 10WV	T
C473	EEAFC0J101H	Electrolytic 100PF 6.3WV	T
C474	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C501	F1J1H472A733	Ceramic 0.0047MFD 50WV	T
C502	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C503	F1J1H473A733	Ceramic 0.047MFD 50WV	T
C504	F1J1H563A733	Ceramic 0.056MFD 50WV	T
C505	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C506	F1J1H102A733	Ceramic 1000pF 50WV	T
C507	F1J1H563A733	Ceramic 0.056MFD 50WV	T
C508	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C509	F2A0J101A409	Electrolytic 100pF 6.3WV	T
C510	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C511	F1J1C105A182	Ceramic 1MFD 16WV	T
C512	F1J1H473A733	Ceramic 0.047MFD 50WV	T
C513	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C514	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C515	F2A0J101A409	Electrolytic 100pF 6.3WV	T
C516	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C517	F2A0J101A409	Electrolytic 100pF 6.3WV	T
C518	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C519	F1J1H680A732	Ceramic 68pF 50WV	T
C520	F1J1H680A732	Ceramic 68pF 50WV	T
C521	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C522	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C523	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C524	F1J1C105A182	Ceramic 1MFD 16WV	T
C525	F2A0J101A409	Electrolytic 100pF 6.3WV	T
C526	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C527	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C528	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C529	F2A0J331A410	Electrolytic 330pF 6.3WV	T
C530	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C531	F1J1H473A733	Ceramic 0.047MFD 50WV	T
C533	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C534	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C551	F1J1H271A733	Chip 270pF 50WV	T
C552	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C553	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C554	F2A0J470A407	Electrolytic 47pF 6.3WV	T
C555	F1J1H100A732	Ceramic 10pF 50WV	T
C556	F1J1H100A732	Ceramic 10pF 50WV	T
C557	F2A1C100A401	Electrolytic 10pF 16WV	T
C601	F1J1H220A732	Chip 22pF 50WV	T
C602	F1J1H220A732	Chip 22pF 50WV	T
C603	F1J1C105A182	Ceramic 1MFD 16WV	T
C604	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C605	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C606	ECA0JM102J	Electrolytic 1000PF 6.3WV	T
C607	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C608	F1J1H101A732	Ceramic 100pF 50WV	T
C609	F1J1C105A173	Ceramic 1MFD 16WV	T
C610	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C620	F1J1C105A182	Ceramic 1MFD 16WV	T
C631	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C632	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C651	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C681	F2A1H2R2A407	Electrolytic 2.2pF 50WV	T
C701	F2A1C2220082	Electrolytic 2200pF 16WV	T
C702	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C703	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C704	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C705	F2A1C101A405	Electrolytic 100pF 16WV	T
C706	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C707	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C708	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C709	EEAFC1A820H	Electrolytic 82PF 10WV	T
C710	F2A1A101A354	Electrolytic 100pF 10WV	T
C711	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C712	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C871	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C872	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C881	F1J1H104A733	Ceramic 0.1MFD 50WV	T
DISPLAY BLOCK [E-4C313]			
C901	F1J1H104A733	Ceramic 0.1MFD 50WV	T
C902	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C903	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C904	F1J1H681A733	Ceramic 680pF 50WV	T
C906	F1J1H103A733	Ceramic 0.01MFD 50WV	T
C907	F1J1H103A733	Ceramic 0.01MFD 50WV	T
CD SERVO BLOCK [E-4C288]			
C1	F1J1H104A733	Ceramic 0.1MFD 50WV	T
4. Resistors			
MAIN BLOCK [E-4C312]			
J1	D0YFR00J0001	Chip 0 ohms 1/8W	T
J2	D0YFR00J0001	Chip 0 ohms 1/8W	T
J3	D0YFR00J0001	Chip 0 ohms 1/8W	T
J4	D0YFR00J0001	Chip 0 ohms 1/8W	T
J5	D0YFR00J0001	Chip 0 ohms 1/8W	T
J6	D0YFR00J0001	Chip 0 ohms 1/8W	T
J7	D0YFR00J0001	Chip 0 ohms 1/8W	T
J8	D0YFR00J0001	Chip 0 ohms 1/8W	T
J9	D0YFR00J0001	Chip 0 ohms 1/8W	T
J10	D0YFR00J0001	Chip 0 ohms 1/8W	T
J11	D0YFR00J0001	Chip 0 ohms 1/8W	T
J12	D0YFR00J0001	Chip 0 ohms 1/8W	T
J13	D0YFR00J0001	Chip 0 ohms 1/8W	T
J14	D0YFR00J0001	Chip 0 ohms 1/8W	T
J15	D0YFR00J0001	Chip 0 ohms 1/8W	T
J16	D0YFR00J0001	Chip 0 ohms 1/8W	T
J18	D0YFR00J0001	Chip 0 ohms 1/8W	T
J19	D0YFR00J0001	Chip 0 ohms 1/8W	T
J20	D0YFR00J0001	Chip 0 ohms 1/8W	T
J21	D0YFR00J0001	Chip 0 ohms 1/8W	T
J22	D0YFR00J0001	Chip 0 ohms 1/8W	T
J23	D0YFR00J0001	Chip 0 ohms 1/8W	T
J24	D0YFR00J0001	Chip 0 ohms 1/8W	T
J25	D0YFR00J0001	Chip 0 ohms 1/8W	T
J26	D0YFR00J0001	Chip 0 ohms 1/8W	T
J27	D0YFR00J0001	Chip 0 ohms 1/8W	T
J28	D0YFR00J0001	Chip 0 ohms 1/8W	T
J31	D0YFR00J0001	Chip 0 ohms 1/8W	T
J33	D0YFR00J0001	Chip 0 ohms 1/8W	T
J34	D0YFR00J0001	Chip 0 ohms 1/8W	T
J35	D0YFR00J0001	Chip 0 ohms 1/8W	T
J36	D0YFR00J0001	Chip 0 ohms 1/8W	T
J37	D0YFR00J0001	Chip 0 ohms 1/8W	T
J38	D0YFR00J0001	Chip 0 ohms 1/8W	T
J39	D0YFR00J0001	Chip 0 ohms 1/8W	T
J40	D0YFR00J0001	Chip 0 ohms 1/8W	T
J41	D0YFR00J0001	Chip 0 ohms 1/8W	T
J42	D0YFR00J0001	Chip 0 ohms 1/8W	T

Ref. No.	Part No.	Part Name & Description	Remarks
J43	D0YFR00J0001	Chip 0 ohms 1/8W	T
J44	D0YFR00J0001	Chip 0 ohms 1/8W	T
J45	D0YFR00J0001	Chip 0 ohms 1/8W	T
J46	D0YFR00J0001	Chip 0 ohms 1/8W	T
J47	D0YFR00J0001	Chip 0 ohms 1/8W	T
J49	D0YFR00J0001	Chip 0 ohms 1/8W	T
J50	D0YFR00J0001	Chip 0 ohms 1/8W	T
J51	D0YFR00J0001	Chip 0 ohms 1/8W	T
J52	D0YFR00J0001	Chip 0 ohms 1/8W	T
J53	D0YFR00J0001	Chip 0 ohms 1/8W	T
J54	D0YFR00J0001	Chip 0 ohms 1/8W	T
J55	D0YFR00J0001	Chip 0 ohms 1/8W	T
J56	D0YFR00J0001	Chip 0 ohms 1/8W	T
J57	D0YFR00J0001	Chip 0 ohms 1/8W	T
J58	D0YFR00J0001	Chip 0 ohms 1/8W	T
R51	D0GD5R6JA052	Chip 5.6 ohms 1/10W	T
R52	D0YFR00J0001	Chip 0 ohms 1/8W	T
R53	D0GD101JA017	Chip 100 ohms 1/10W	T
R54	D0GD221JA017	Chip 220 ohms 1/10W	T
R55	D0YFR00J0001	Chip 0 ohms 1/8W	T
R56	D0GD393JA017	Chip 39k ohms 1/10W	T
R60	D0GD221JA017	Chip 220 ohms 1/10W	T
R61	D0YFR00J0001	Chip 0 ohms 1/8W	T
R62	D0YFR00J0001	Chip 0 ohms 1/8W	T
R63	D0YFR00J0001	Chip 0 ohms 1/8W	T
R64	D0YFR00J0001	Chip 0 ohms 1/8W	T
R71	D0GD102JA017	Chip 1k ohms 1/10W	T
R101	D0GD512JA017	Chip 5k ohms 1/8W	T
R102	D0GD331JA017	Chip 330 ohms 1/10W	T
R103	D0GD100JA017	Chip 10 ohms 1/10W	T
R205	D0GD472JA017	Chip 4.7k ohms 1/10W	T
R207	D0GD123JA017	Chip 12k ohms 1/10W	T
R209	D0GF682JA017	Chip 6.8k ohms 1/8W	T
R211	D0GD181JA017	Chip 180 ohms 1/10W	T
R212	D0GD561JA017	Chip 560 ohms 1/10w	T
R213	D0GD103JA017	Chip 10k ohms 1/10W	T
R221	D0GD181JA017	Chip 180 ohms 1/10W	T
R222	D0GD561JA017	Chip 560 ohms 1/10w	T
R223	D0GD103JA017	Chip 10k ohms 1/10W	T
R251	D0GD393JA017	Chip 39k ohms 1/10W	T
R252	D0GD473JA017	Chip 47k ohms 1/10W	T
R271	D0GF223JA017	Chip 22k ohms 1/8W	T
R273	D0YFR00J0001	Chip 0 ohms 1/8W	T
R274	D0YFR00J0001	Chip 0 ohms 1/8W	T
R277	D0GD682JA017	Chip 6.8k ohms 1/10W	T
R278	D0GF131JA048	Chip 130 ohms 1/8W	T
R305	D0GD472JA017	Chip 4.7k ohms 1/10W	T
R307	D0GD123JA017	Chip 12k ohms 1/10W	T
R309	D0GD682JA017	Chip 6.8k ohms 1/10W	T
R311	D0GD181JA017	Chip 180 ohms 1/10W	T
R312	D0GD561JA017	Chip 560 ohms 1/10w	T
R313	D0GD103JA017	Chip 10k ohms 1/10W	T
R321	D0GD181JA017	Chip 180 ohms 1/10W	T
R322	D0GD561JA017	Chip 560 ohms 1/10w	T
R323	D0GD103JA017	Chip 10k ohms 1/10W	T
R401	D0AZ223JA008	Chip 22k ohms 1/6W	T
R402	D0GD682JA017	Chip 6.8k ohms 1/10W	T
R403	D0AE223JA131	Chip 22k ohms 1/4W	T
R404	D0GD223JA017	Chip 22k ohms 1/10W	T
R405	D0GD153JA017	Chip 15k ohms 1/10W	T
R406	D0GD333JA017	Chip 33k ohms 1/10W	T
R407	D0GD622JA017	Chip 6.2k ohms 1/10W	T
R408	D0GF333JA017	Chip 33k ohms 1/8W	T
R409	D0GD622JA017	Chip 6.2k ohms 1/10W	T
R410	D0AZ103JA008	Chip 10k ohms 1/6W	T
R441	D0GD330JA017	Chip 33 ohms 1/10W	T
R442	D0GD3R3JA052	Chip 3.3 ohms 1/10W	T
R443	D0GD102JA017	Chip 1k ohms 1/10W	T
R444	D0GD102JA017	Chip 1k ohms 1/10W	T
R445	D0GD471JA017	Chip 470 ohms 1/10W	T
R471	D0GD163JA017	Chip 16k ohms 1/10W	T
R472	D0GF103JA014	Chip 10k ohms 1/8W	T
R501	D0GD331JA017	Chip 330 ohms 1/10W	T

Ref. No.	Part No.	Part Name & Description	Remarks
R502	D0YFR00J0001	Chip 0 ohms 1/8W	T
R503	D0YFR00J0001	Chip 0 ohms 1/8W	T
R504	D0GF472JA017	Chip 4.7k ohms 1/8W	T
R505	D0GF472JA017	Chip 4.7k ohms 1/8W	T
R506	D0GD681JA017	Chip 680 ohms 1/10W	T
R507	D0GD335JA052	Chip 3.3M ohms 1/10W	T
R508	D0GD681JA017	Chip 680 ohms 1/10W	T
R509	D0GD683JA017	Chip 68k ohms 1/10W	T
R510	D0GDR00JA017	Chip 0 ohms 1/10W	T
R511	D0GDR00JA017	Chip 0 ohms 1/10W	T
R512	D0GD273JA017	Chip 27k ohms 1/10W	T
R513	D0GD562JA017	Chip 5.6k ohms 1/10w	T
R514	D0GD273JA017	Chip 27k ohms 1/10W	T
R516	D0GD273JA017	Chip 27k ohms 1/10W	T
R517	D0AZ102JA008	Chip 1k ohms 1/6W	T
R518	D0AZ102JA008	Chip 1k ohms 1/6W	T
R519	D0GD220JA017	Chip 22 ohms 1/10W	T
R520	D0GD332JA017	Chip 3.3k ohms 1/10W	T
R521	D0GD151JA017	Chip 150 ohms 1/10W	T
R522	D0GD223JA017	Chip 22k ohms 1/10W	T
R523	D0GD470JA017	Chip 47 ohms 1/10W	T
R524	D0GD100JA017	Chip 10 ohms 1/10W	T
R525	D0GD221JA017	Chip 220 ohms 1/10W	T
R530	D0GD473JA017	Chip 47k ohms 1/10W	T
R551	D0GDR00JA017	Chip 0 ohms 1/10W	T
R554	D0GD103JA017	Chip 10k ohms 1/10W	T
R555	D0GD225JA017	Chip 2.2M ohms 1/10W	T
R556	D0GD103JA017	Chip 10k ohms 1/10W	T
R557	D0YFR00J0001	Chip 0 ohms 1/8W	T
R558	D0YFR00J0001	Chip 0 ohms 1/8W	T
R601	D0GD473JA017	Chip 47k ohms 1/10W	T
R602	D0GD473JA017	Chip 47k ohms 1/10W	T
R605	D0GF473JA017	Chip 47k ohms 1/8W	T
R607	D0GF473JA017	Chip 47k ohms 1/8W	T
R610	D0GD222JA017	Chip 2.2k ohms 1/10W	T
R611	D0GD473JA017	Chip 47k ohms 1/10W	T
R612	D0GD103JA017	Chip 10k ohms 1/10W	T
R613	D0GD103JA017	Chip 10k ohms 1/10W	T
R614	D0GF102JA014	Chip 1k ohms 1/8W	T
R615	D0GD102JA017	Chip 1k ohms 1/10W	T
R616	D0GF473JA017	Chip 47k ohms 1/8W	T
R618	D0YFR00J0001	Chip 0 ohms 1/8W	T
R619	D0AE102JA131	Chip 1k ohms 1/4W	T
R620	D0GD102JA017	Chip 1k ohms 1/10W	T
R621	D0GD102JA017	Chip 1k ohms 1/10W	T
R622	D0GD102JA017	Chip 1k ohms 1/10W	T
R623	D0GD102JA017	Chip 1k ohms 1/10W	T
R624	D0GD473JA017	Chip 47k ohms 1/10W	T
R625	D0GD473JA017	Chip 47k ohms 1/10W	T
R626	D0GD473JA017	Chip 47k ohms 1/10W	T
R627	D0AZ272JA008	Chip 2.7k ohms 1/4W	T
R628	D0GD122JA017	Chip 1.2k ohms 1/10W	T
R633	D0GF511JA017	Chip 510 ohms 1/8W	T
R634	D0GDR00JA017	Chip 0 ohms 1/10W	T
R636	D0GD102JA017	Chip 1k ohms 1/10W	T
R637	D0GD154JA017	Chip 150k ohms 1/10W	T
R638	D0GD333JA017	Chip 33k ohms 1/10W	T
R639	D0GD103JA017	Chip 10k ohms 1/10W	T
R640	D0AZ473JA008	Chip 47k ohms 1/6W	T
R641	D0GF473JA017	Chip 47k ohms 1/8W	T
R651	D0GF102JA014	Chip 1k ohms 1/8W	T
R652	D0GD104JA017	Chip 100k ohms 1/10W	T
R653	D0GD102JA017	Chip 1k ohms 1/10W	T
R654	D0GD104JA017	Chip 100k ohms 1/10W	T
R655	D0GD102JA017	Chip 1k ohms 1/10W	T
R656	D0GD102JA017	Chip 1k ohms 1/10W	T
R657	D0GD104JA017	Chip 100k ohms 1/10W	T
R658	D0GD102JA017	Chip 1k ohms 1/10W	T
R659	D0GD104JA017	Chip 100k ohms 1/10W	T
R660	D0GD122JA017	Chip 1.2k ohms 1/10W	T
R661	D0AZ104JA008	Chip 100k ohms 1/6W	T
R681	D0GD271JA017	Chip 270 ohms 1/10W	T
R682	D0GD272JA017	Chip 2.7k ohms 1/10W	T

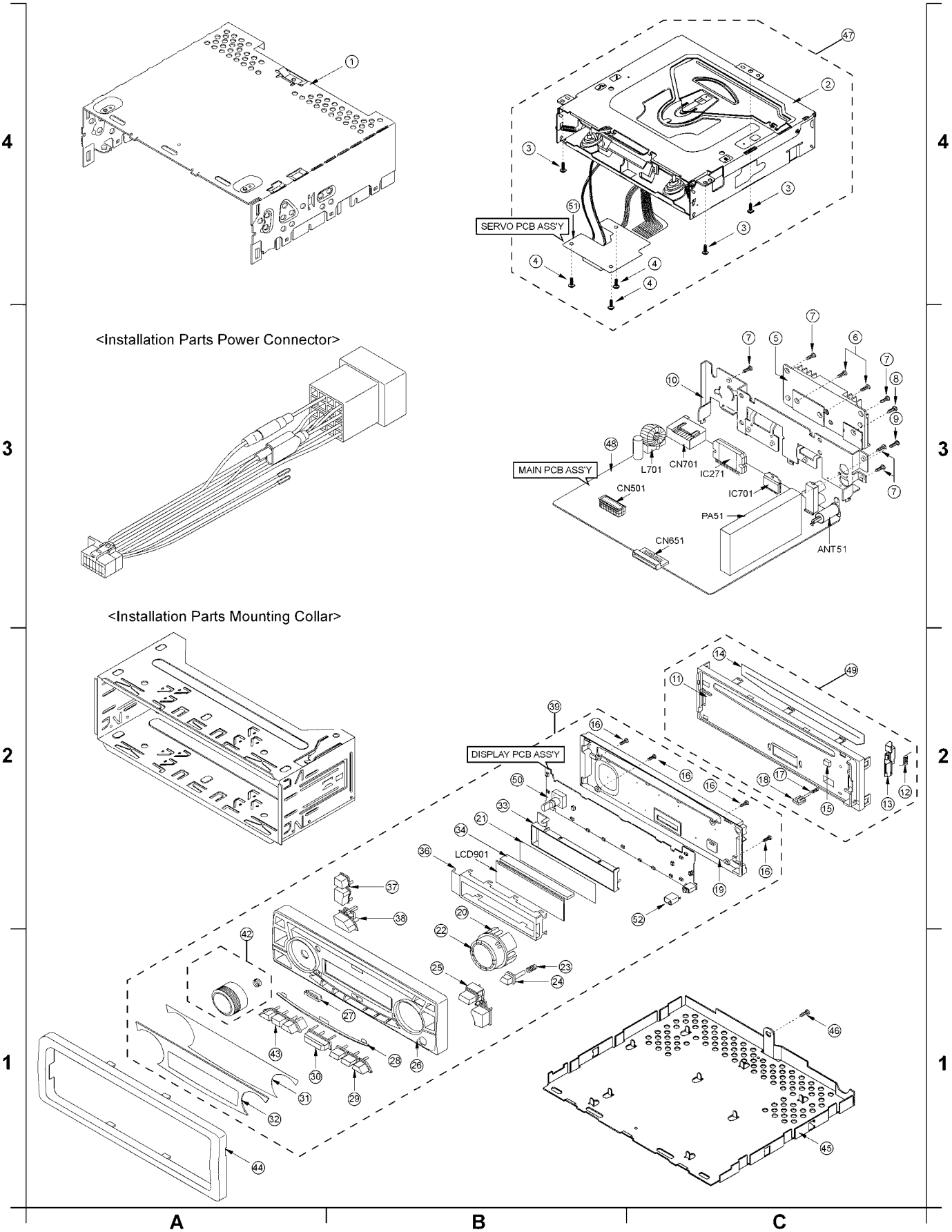
Ref. No.	Part No.	Part Name & Description	Remarks
R691	D0GF473JA017	Chip 47k ohms 1/8W	T
R701	D0AZ823JA008	Chip 82k ohms 1/6W	T
R703	D0AE102JA131	Chip 1k ohms 1/4W	T
R704	D0GD473JA017	Chip 47k ohms 1/10W	T
R705	D0GD102JA017	Chip 1k ohms 1/10W	T
R706	D0GD153JA017	Chip 15k ohms 1/10W	T
R707	D0GD332JA017	Chip 3.3k ohms 1/10W	T
R713	D0GD223JA017	Chip 22k ohms 1/10W	T
R751	D0GD333JA017	Chip 33k ohms 1/10W	T
R752	D0GD104JA017	Chip 100k ohms 1/10W	T
R753	D0GD473JA017	Chip 47k ohms 1/10W	T
R871	D0GD471JA017	Chip 470 ohms 1/10W	T
RA601	D1H81024A031	Chip 10.2M ohms 1/16W	T
RA602	D1H81024A031	Chip 10.2M ohms 1/16W	T
RA603	D1H81024A031	Chip 10.2M ohms 1/16W	T
RA651	D1H81024A031	Chip 10.2M ohms 1/16W	T
DISPLAY BLOCK [E-4C313]			
R901	D0YFR00J0001	Chip 0 ohms 1/8W	T
R902	D0GD4R7JA056	Chip 4.7 ohms 1/10W	T
R903	D0GD623JA052	Chip 62k ohms 1/10W	T
R904	D0GD681JA017	Chip 680 ohms 1/10W	T
R905	D0GD821JA017	Chip 820 ohms 1/10W	T
R906	D0GD561JA017	Chip 560 ohms 1/10w	T
R907	D0GD561JA017	Chip 560 ohms 1/10w	T
R908	D0GD561JA017	Chip 560 ohms 1/10w	T
R909	D0GF241JA048	Chip 240 ohms 1/8W	T
R912	D0GD102JA017	Chip 1k ohms 1/10W	T
R913	D0GD102JA017	Chip 1k ohms 1/10W	T
R914	D0GD102JA017	Chip 1k ohms 1/10W	T
R915	D0GD272JA017	Chip 2.7k ohms 1/10W	T
R916	D0GD102JA017	Chip 1k ohms 1/10W	T
R917	D0GD102JA017	Chip 1k ohms 1/10W	T
R918	D0GDR00JA017	Chip 0 ohms 1/10W	T
CD SERVO BLOCK [E-4C288]			
J30	D0YFR00J0001	Chip 0 ohms 1/8W	T
J31	D0YFR00J0001	Chip 0 ohms 1/8W	T
J32	D0YFR00J0001	Chip 0 ohms 1/8W	T
J33	D0YFR00J0001	Chip 0 ohms 1/8W	T
J34	D0YFR00J0001	Chip 0 ohms 1/8W	T
J35	D0YFR00J0001	Chip 0 ohms 1/8W	T
J36	D0YFR00J0001	Chip 0 ohms 1/8W	T
J37	D0YFR00J0001	Chip 0 ohms 1/8W	T
5. Connectors			
MAIN BLOCK [E-4C312]			
CN501	K1KA22A00001	Connector	T
CN651	K1KY15BA0032	Connector	T
CN701	K1FA116B0028	Connector	T
CN351	YEAER120002	Connector	T
DISPLAY BLOCK [E-4C313]			
CN901	K1KY15BA0031	Connector	T
CN951	K2HC101A0003	Aux Jack	T
CD SERVO BLOCK [E-4C288]			
CN1	K1KB22AA0200	Connector	T
CN2	K1MY16BA0184	SMD Connector	T
6. Electric Parts			
SWITCHES			
SW901	K0H1BA000445	Tack Swich	T
SW902	K0H1BA000445	Tack Swich	T
SW903	K0H1BA000445	Tack Swich	T
SW904	K0H1BA000445	Tack Swich	T
SW905	K0H1BA000445	Tack Swich	T

Ref. No.	Part No.	Part Name & Description	Remarks
SW906	K0H1BA000445	Tack Swich	T
SW907	K0H1BA000445	Tack Swich	T
SW908	K0H1BA000445	Tack Swich	T
SW909	K0H1BA000445	Tack Swich	T
SW910	K0H1BA000445	Tack Swich	T
SW911	K0H1BA000445	Tack Swich	T
SW912	K0H1BA000445	Tack Swich	T
SW913	K0H1BA000445	Tack Swich	T
SW914	K0H1BA000445	Tack Swich	T
SW915	K0H1BA000445	Tack Swich	T
SW916	K0H1BA000445	Tack Swich	T
CRYSTAL			
XL501	YEXL16M9X54A	Ceramic Filter	T
XL551	YEXL4C4332TT	Crystal(7.2MHz)	T
XL601	H0A450000001	Crystal	T
COILS			
L51	G1C150JA0036	Coil	T
L52	G1CR56JA0036	Coil	T
L71	G1C8R2JA0036	Coil	T
L501	G1C2R2JA0036	RF Coil	T
L502	G1C2R2JA0036	RF Coil	T
L551	G1C330JA0036	Coil	T
L701	YETQ024C081	Choke Coil	T
VR			
SW951	K9AA024A0014	Encoder	T
LCD			
LCD901	YEXDCM4C142	LCD	T
SURGE PROTECTOR			
Z51	D4ZZ00000024	Surge Protector	T
7. Accessories			
PRINT			
	YFM284C634CA	Operating Instructions(ENGLISH)	T
	YFM284C635CA	Operating Instructions(GERMANY)	T
	YFM284C636CA	Operating Instructions(FRANCE)	T
	YFM284C637CA	Operating Instructions(HOLLAND)	T
	YFM284C638CA	Operating Instructions(SWEDEN)	T
	YFM284C639CA	Operating Instructions(ITALY)	T
	YFM284C640CA	Operating Instructions(SPAIN)	T
	YFM284C641CA	Operating Instructions(DENMARK)	T
	YFM284C642CA	Operating Instructions(POLLAND)	T
	YFM284C643CA	Operating Instructions(CZECH)	T
	YFM284C644CA	Operating Instructions(HUNGARY)	T
	YFM284C645CA	Operating Instructions(RUSSIA)	T
	YFM294C078CA	Installation Instructions	T
	YFM294C079CA	Installation Instructions	T
	YFM294C080CA	Installation Instructions	T
INSTALLATION PARTS			
	FX0214C384ZB	Escape Case	T
	YEAJ02874	Power Connector	T
	ZZBISC1021N-J	Screw Kit	T
	YFC054C061ZB	Unit Case	T
	YFC054C056ZB	Unit Case	T

Ref. No.	Part No.	Part Name & Description	Remarks
8. Mechanical Parts			
MISCELLANEOUS			
ANT51	YEAA094C008	ANT JACK	T(3-C)
1	YFA034C053CA	Upper Cover	T(4-B)
2	YGFD044C002	CD Deck	T(4-C)
3	XTB26+5FFN	Screw	T(4-C)
4	XTW2+5FFN	Screw	T(4-C)
5	YFF014C055CA	Heat Sink	T(3-C)
6	YEJT034C019N	Screw(CUP TIGHT 3X12)	T(3-C)
7	XTB3+8FFZ	Screw	T(3-C)
8	YJS064C002FN	Screw	T(3-C)
9	XTB26+8GFN	Screw	T(3-C)
10	YFA084C063CA	Rear Plate	T(3-C)
11	YFC034C002CA	ESC Holder	T(2-C)
12	YFX054C074CA	Spring (HOOK)	T(2-C)
13	YEFX9991682B	Release Hook	T(2-C)
14	YEFS02302	Dust Felt	T(2-C)
15	YEFS011113	Pad	T(2-C)
16	XTN2+8GFZ	Screw	T(2-C)
17	YFX054C071CA	Spring (PUSH BUTTON)	T(2-C)
18	YFE134C491YA	Button (Push)	T(2-C)
19	YFC024C699CB	ESC Rear Cover	T(2-C)
20	YFE134C510CA	Button (TUNE/TRACK)Ring	T(1-B)
21	YFV024C108CA	Sheet	T(2-B)
22	YFE134C511CB	Button (TUNE/TRACK)	T(1-B)
23	YFX054C072CA	Spring (OPEN)	T(1-B)
24	YFE134C505CA	Button(RELEASE)	T(1-B)
25	YFE134C508CA	Button (DISP/EJ)	T(1-B)
26	YFC034C070CA	ESC Printing	T(1-B)
27	YFX014C091CA	Panel Light (CD)	T(1-A)
28	YFJ014C164CA	ARC Panel	T(1-A)
29	YFE134C513CA	Button (4-6)	T(1-A)
30	YFE134C514CA	Button (SRC/PWR)	T(1-A)
31	YFX994C126CA	Two-Side Tape	T(1-A)
32	YFJ014C222CA	Ornament Panel	T(1-A)
33	YFX014C090CA	Back Light Assy	T(2-B)
34	YFS014C110CA	Rubber Gum	T(2-B)
36	YFX214C405CA	LCD Bracket	T(2-B)
37	YFE134C506CA	Button(BAND/MUTE)	T(2-B)
38	YFE134C507CA	Button (SQ)	T(2-B)
39	ESCC1465N-J	ESC Unit Assy	T(2-B)/RTL
42	YFE074C069CB	VOL Knob ASSY	T(1-A)
43	YFE134C512CA	Button (1-3)	T(1-A)
44	YFC054C079YA	Trim Plate	T(1-A)
45	YFA054C042ZA	Bottom Cover	T(1-C)
46	XSB3+6FN	Screw	T(1-C)
47	AADK288E0-J	Deck Assy	T(4-C)
48	AAPB312A0-J	Main PCB Ass’y	T(3-B)/RTL
49	ZZFP-192	ESC Hold Assy	T(2-C)
50	APCB313B0-J	Key PCB Ass’y	T(2-B)/RTL
51	APCB288A0-J	Servo PCB Assy	T(4-B)/RTL
52	YFX214C407CA	AUX Bracket	T(2-C)

13 EXPLODED VIEW (Unit)

■ Numbers in ○ are indicated REF.No.in the REPLACEMENT PARTS LIST



<Installation Parts Power Connector>

<Installation Parts Mounting Collar>

14 CD PLAYER MECHANICAL PARTS LIST

Note:

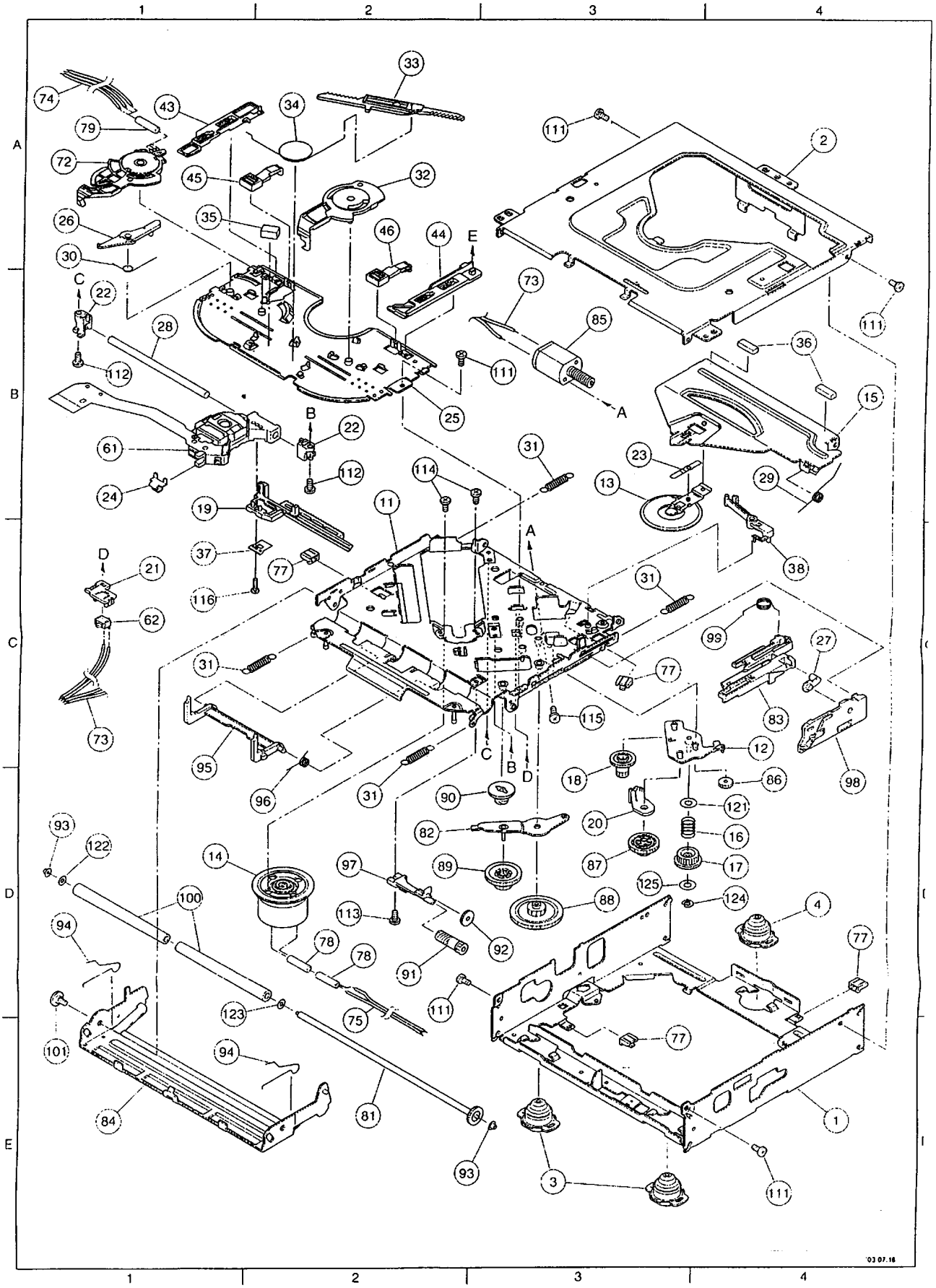
1. Be sure to make your orders of replacement parts according to this list.
2. Important safty notice: Component , indentified by ⚠ mark have special characteristics important for safety. when replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing. as in a load map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. Aft the end of this period, the assembly will no longer be available.
5. "T" marks in remarks colum are indicated supply parts of PTW.

▪ Order intake period is basically six months after the first shipment

* "N"marks in remarks colum are indicated supply parts as not available and to order the assembly

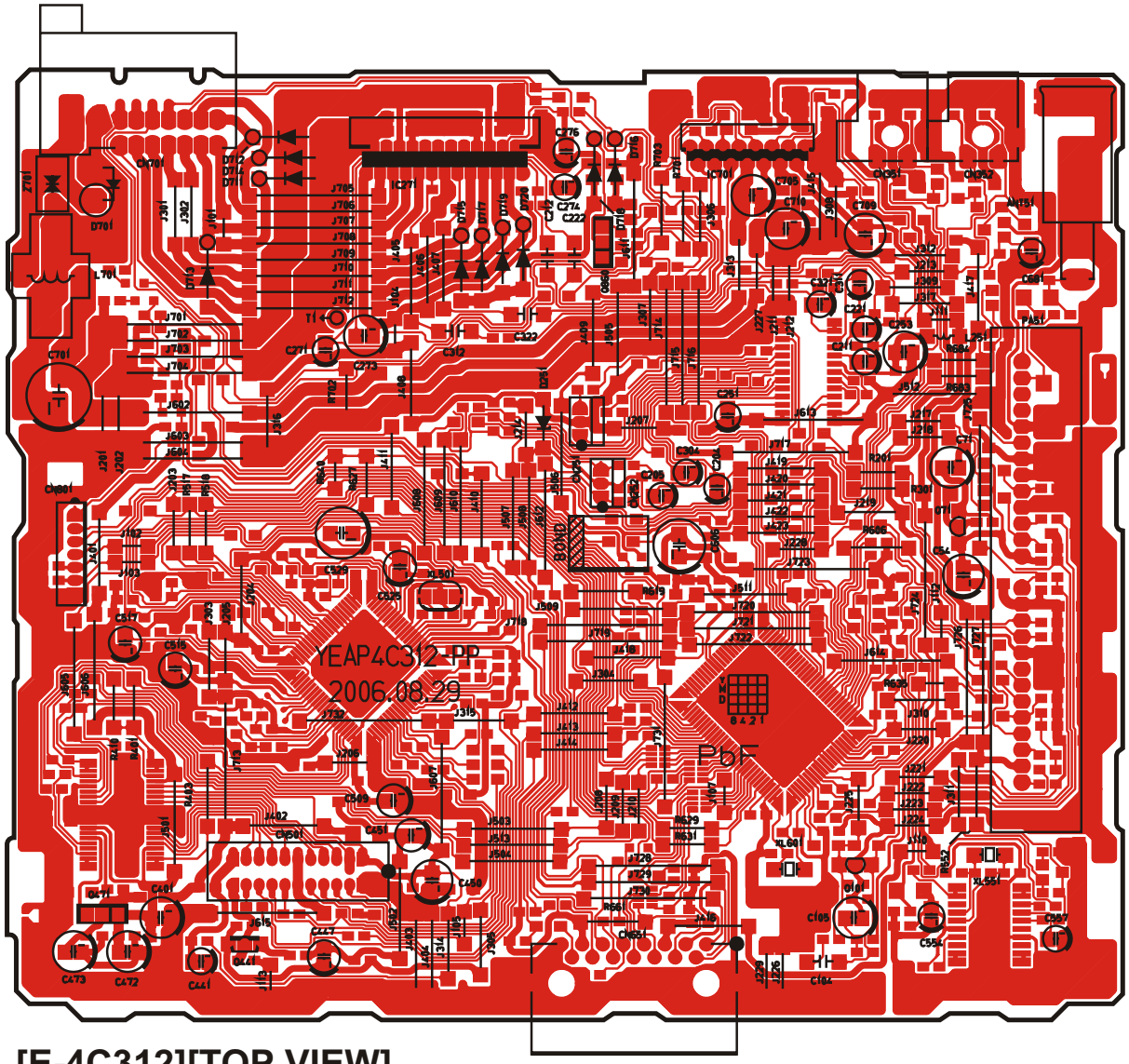
Ref. No.	Part No.	Part Name & Description	Remarks
1	3032 01 36	FRAME (M2)	N(E-4)
2	3032 01 37	TOP COVER (M2)	N(A-4)
3	3032 01 15	DAMPER F	N(E-3)
4	3032 01 16	DAMPER R	N(D-4)
11	3032 05 508	CHASSIS RIVET ASS'Y(M2)	N(B-2)
12	3032 05 504	CHASSIS PLTAE RIVET ASS'Y(M)	N(C-4)
13	3032 05 301	CLAMPER ASS'Y	N(B-3)
14	3032 05 307	SPINDLE MOTOR (M) ASS'Y	T(D-1)
15	3032 05 56	CLAMPER ARM M	N(B-4)
16	3032 05 03	CHANGE GEAR SPRING	N(D-4)
17	3032 05 05	CHANGE GEAR 2	N(D-4)
18	3032 05 06	FEED GEAR	N(D-3)
19	3032 05 51	FEED RACK M	N(B-1)
20	3032 05 53	CHANGE LOCK LEVER M	N(D-3)
21	3032 05 57	FEED SW HOLDER (M)	N(C-1)
22	3032 05 54	PU SHAFT HOLDER (M)	N(B-1); N(B-2)
23	3032 05 13	CLAMPER SUB SPRING	N(B-3)
24	3032 05 58	FD SUB HOLDER M	N(B-1)
25	3032 05 65	TOP PLATE (M2)	N(B-2)
26	3032 05 19	SELECT LOCK ARM	N(A-1)
27	3032 05 21	SLIDE HOOK	N(C-4)
28	3032 05 55	PU SHAFT M	N(B-1)
29	3032 05 59	CLAMPER ARM SPRING M	N(B-4)
30	3032 05 26	SELECT LOCK ARM SPRING	N(A-1)
31	3032 05 62	SUSPENSION SPRING MS	N(B-3); N(C-1); N(C-4); N(D-2)
32	3032 05 64	SELECT ARM R (M2)	N(A-2)
33	3032 05 30	LINK PLATE	N(A-2)
34	3032 05 36	LINK PLATE SPRING S	N(A-2)
35	3032 05 23	CUSHION F	N(A-1)
36	3032 05 24	CUSHION R	N(B-4)
37	3032 05 63	FEED SPR PLATE M	N(C-2)
38	3032 05 61	TRIGGER ARM M	N(C-4)
43	3032 08 03	SELECT PLATE L	N(A-1)
44	3032 08 04	SELECT PLATE R	N(A-2)
45	3032 08 05	SELECT PIECE L	N(A-1)
46	3032 08 06	SELECT PIECE R	N(A-2)
61	6904 16 06	PICK UP RD-DAP005-TN	T(B-1)
62	6418 04 07	DET SW ESE 22MH55	N(C-1)
72	3032 10 02	MODE SW	T(A-1)
73	3032 10 51	LD WIRE MN	T(B-3); T(C-1)
74	3032 10 40	SW WIRE MN	N(A-1)
75	3032 10 39	SP WIRE MN	N(D-2)
77	3032 10 13	WIRE CLAMPER M	N(C-2); N(C-3); N(D-4); N(E-3)
78	3032 10 28	WIRE TUBE SPM	N(D-2)
79	3032 10 29	WIRE TUBE MSW	N(A-1)
81	3032 11 301	ROLLER SHAFT ASS'Y	N(E-2)
82	3032 11 501	LOADING GEAR PLATE RIVET ASS'Y	N(D-2)
83	3032 11 302	LOADING PLATE ASS'Y	N(C-4)
84	3032 11 504	LOCK ARM RIVET ASS'Y (S)	N(E-1)
85	3032 11 305	LOADING / FEED MOTOR ASS'Y (MB)	T(B-3)
86	3032 11 01	LOADING GEAR 1	N(D-4)
87	3032 11 02	LOADING GEAR 2	N(D-3)
88	3032 11 03	LOADING GEAR 3	N(D-3)
89	3032 11 04	LOADING GEAR 4	N(D-2)
90	3032 11 05	LOADING GEAR 5	N(D-2)
91	3032 11 06	LOADING GEAR 6	N(D-2)
92	3032 11 07	LOADING GEAR 7	N(D-3)
93	3032 11 11	ROLLER GUIDE	N(D-1); N(E-3)
94	3032 11 14	ROLLER GUIDE SPRING	N(D-1); N(E-1)
95	3032 11 16	DISC STOPPER ARM	N(C-1)
96	3032 11 17	DISC STOP ARM SPRING	N(D-2)
97	3032 11 18	LD GEAR BRACKET	N(D-2)
98	3032 11 25	L SLIDE PLATE	N(D-4)
99	3032 11 31	LOADING PLATE SPRING	N(C-4)
100	3032 11 37	LDG ROLLER (N)	T(D-1)
101	3032 11 43	COLLAR SCREW	N(E-1)
111	9P04 20 031	TAPPING SCREW 2X3	N(A-3); N(B-3); N(B-4); N(D-2); N(E-4)
112	9P04 20 041	TAPPING SCREW 2X4	N(B-1); N(B-2)
113	9B03 20 041	TAPPING BIND SCREW 2X4	N(D-2)
114	9C01 17 183	CAMERA SCREW 1.7X1.8	N(B-2)
115	9C01 20 203	CAMERA SCREW 2X2	N(C-3)
116	9C45 17 503	CAMERA TAPPING SCREW P3 M1.7X5	N(C-1)
121	9W01 30 170	PW 3.5X8X0.3	N(D-4)
122	9W05 13 060	HLW 1.85X5X0.13	N(D-1)
123	9W07 10 070	LUMILAR WASHER 3.1X6X0.1	N(D-1)
124	9E01 00 152	E RING S 1.5	N(D-4)
125	9W01 13 020	PW 2.1X4X0.13	N(D-3)

15 EXPLODED VIEW (CD Deck)



16 WIRING DIAGRAM

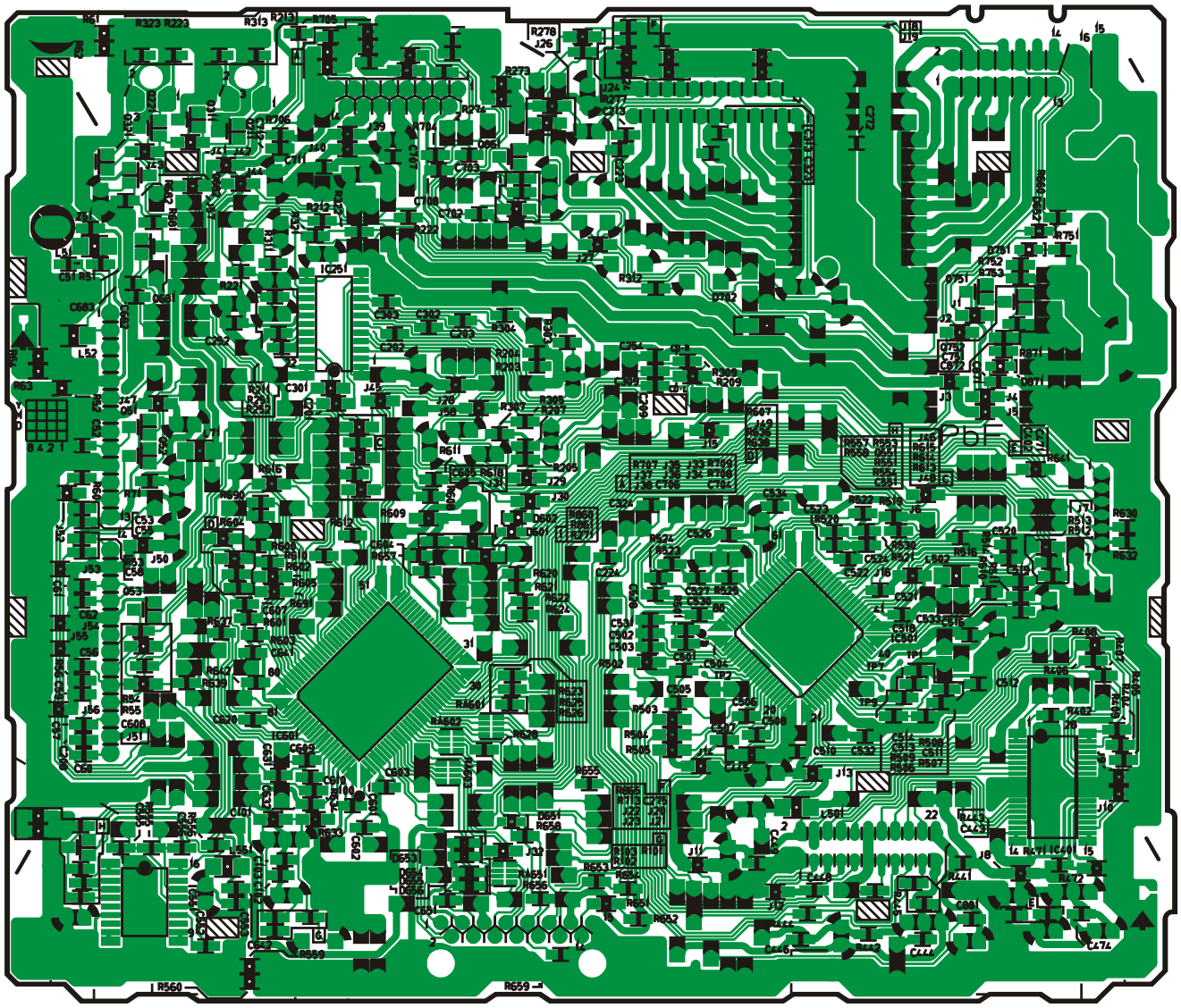
16.1. Main Block-1



[E-4C312][TOP VIEW]

CQ-C1475N/C1465N/C1425N/C1415N /C1405N/C1405W MAIN PCB

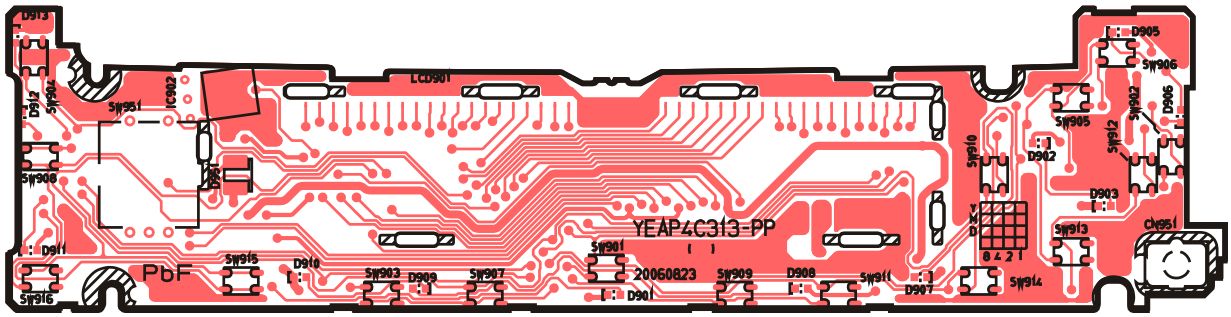
16.2. Main Block-2



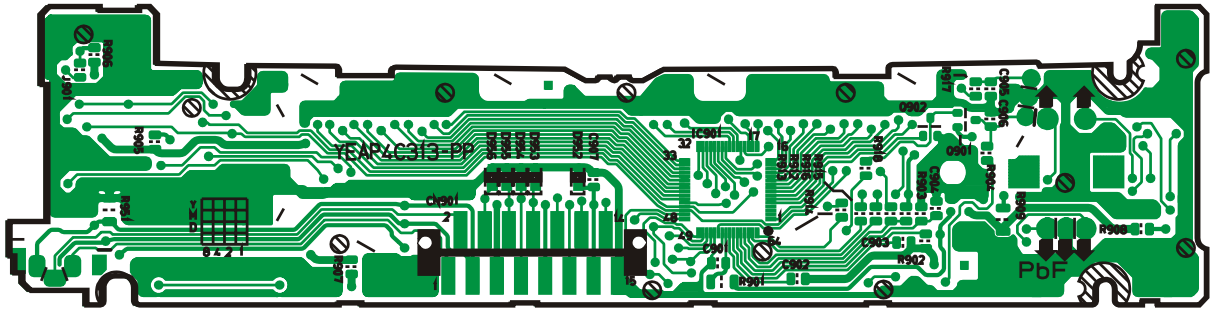
[E-4C312][BOTTOM VIEW]

CQ-C1475N/C1465N/C1425N/C1415N/C1405N/C1405W MAIN PCB

16.3. Display Block



[E-4C313][TOP VIEW]

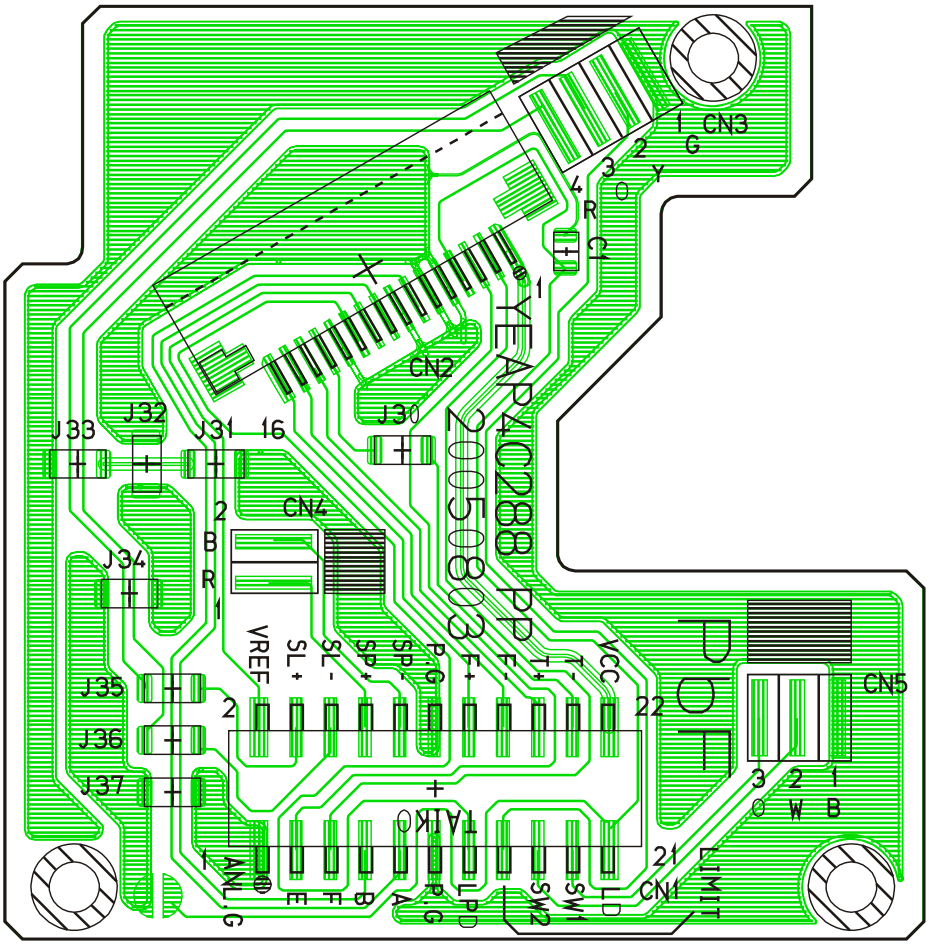


[E-4C313][BOTTOM VIEW]

CQ-C1475N/C1465N/C1425N/C1415N

/CQ-C1405N/C1405W DISPLAY PCB

16.4. CD Interface Block



[E-4C288][BOTTOM VIEW]

CQ-C1325N/C1315N/C1305W/C1115N/C1105W/C1105H
CQ-C1304U/C1475N/C1465N/C1425N/C1415N/C1405N CD SERVO PCB

17 SCHEMATIC DIAGRAM-1

17.1. Main Block

E-4C312

PACK	U/W/H	N	D
PA91	FAE391 -A10	FAE391 -E10	FAE391 -J10

F	U/W/H	N	D
C61	0.027u	0.015u	0.018u
C62	0.027u	0.015u	0.018u

C1-2	N	other
MONO R606		
R607	●	OPEN
Q63		

D1	N	other
TEL_MUTE R610	●	OPEN
R611		

A1-2	N	other
RDS A1	●	OPEN
A2	OPEN	●

G	R600	R601	R602	R603	R604	R605
C1405W	56K	33K	47K	OPEN	47K	OPEN
C1405N	OPEN	47K	47K	OPEN	OPEN	47K

	R690	R691
VCD X	OPEN	47K
VCD ●	47K	OPEN

H	N	other
R702	OPEN	●

I	AUX	C1405U	other
B1-B2	OPEN		●

	U/N	other
B1-B2	OPEN	●
TEL_MUTE D2	N ●	other OPEN
REMO_DATA E1	OTHER OPEN	N ●

E2	REMO_DATA	1405W	N	130X U/H/D
R656	1k	1k	1k	OPEN
D651	0	1S3355T	OPEN	
R657	100k	100k	OPEN	

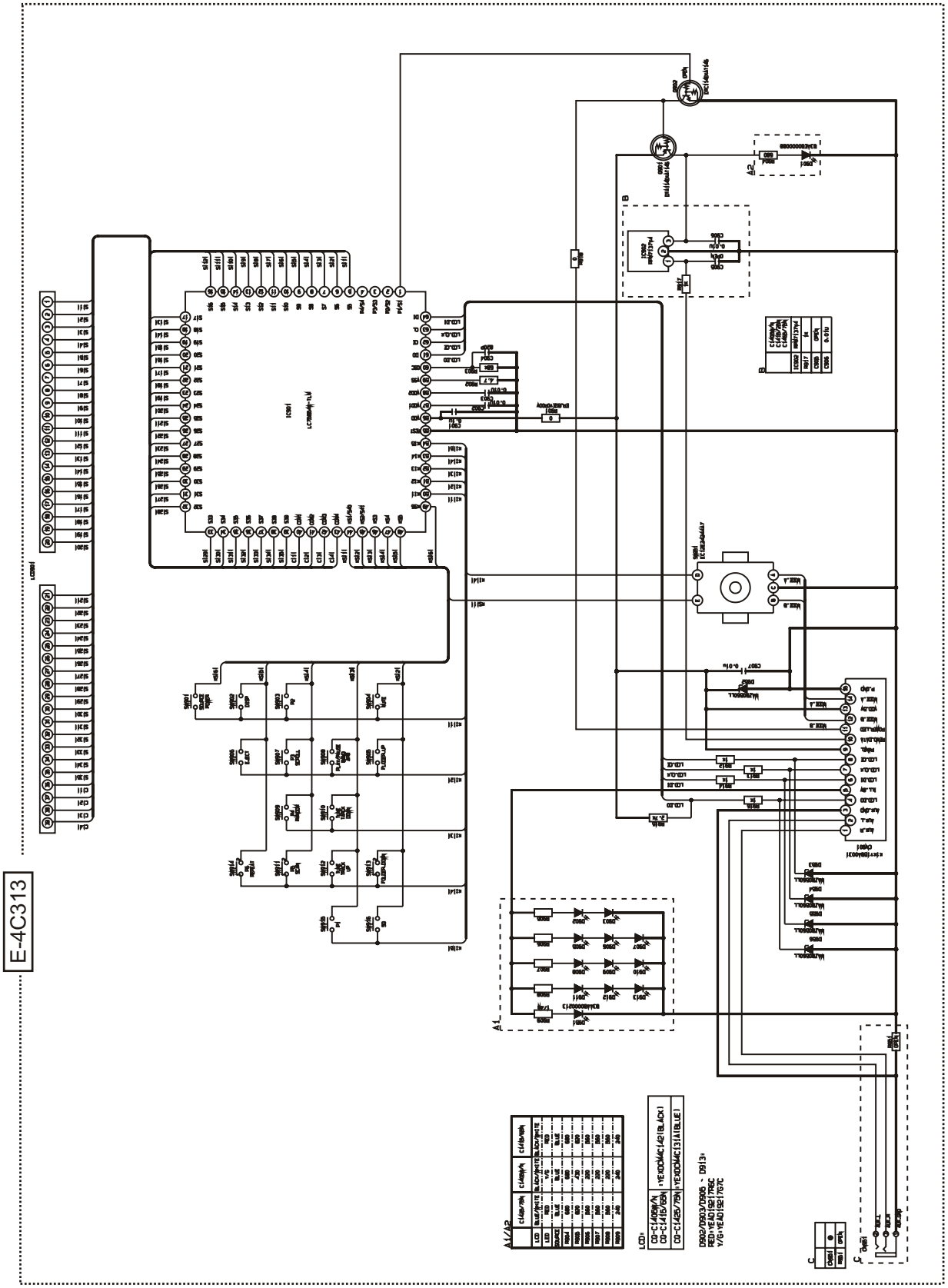
CQ-C1405W/C1405N/C1415N/C1425N/C1465N/C1475N MAIN BLOCK

FOR: CQ-C1405W
CQ-C1405N
CQ-C1415N
CQ-C1425N
CQ-C1465N
CQ-C1475N

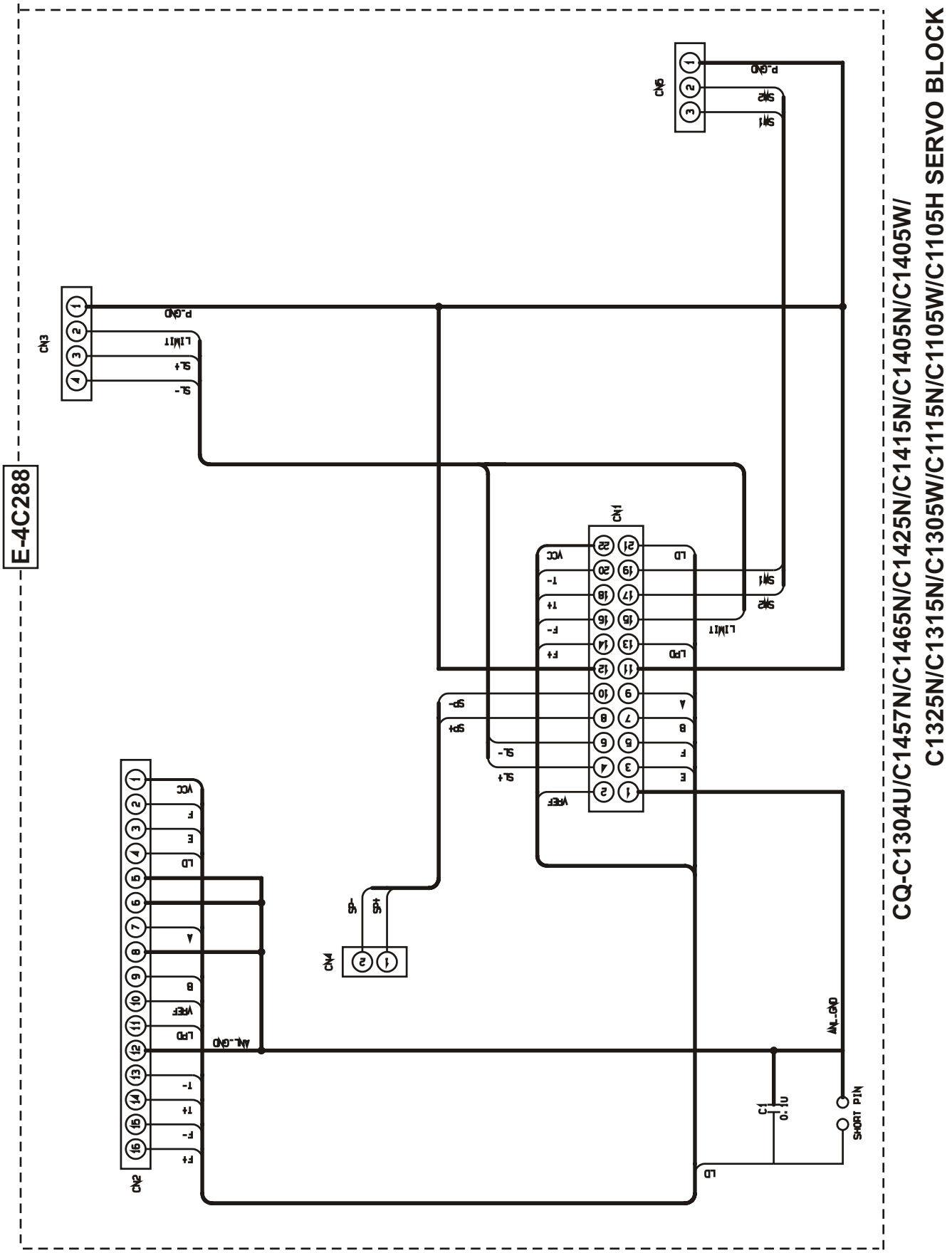
THIS PAGE IS JUST FOR THE PAGE LAYOUT USE ONLY.

18 SCHEMATIC DIAGRAM-2

18.1. Display Block

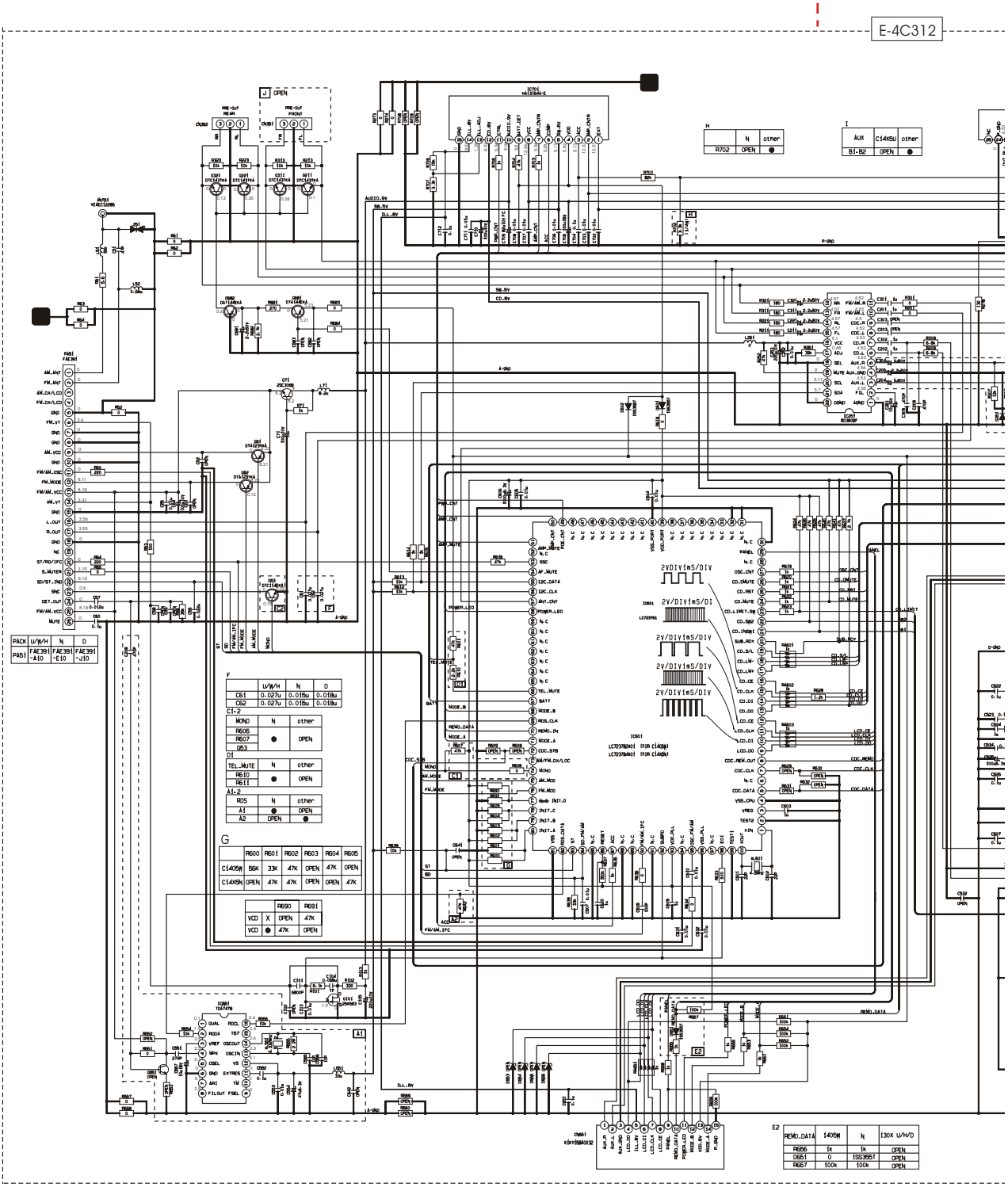


18.2. CD Servo Block-1

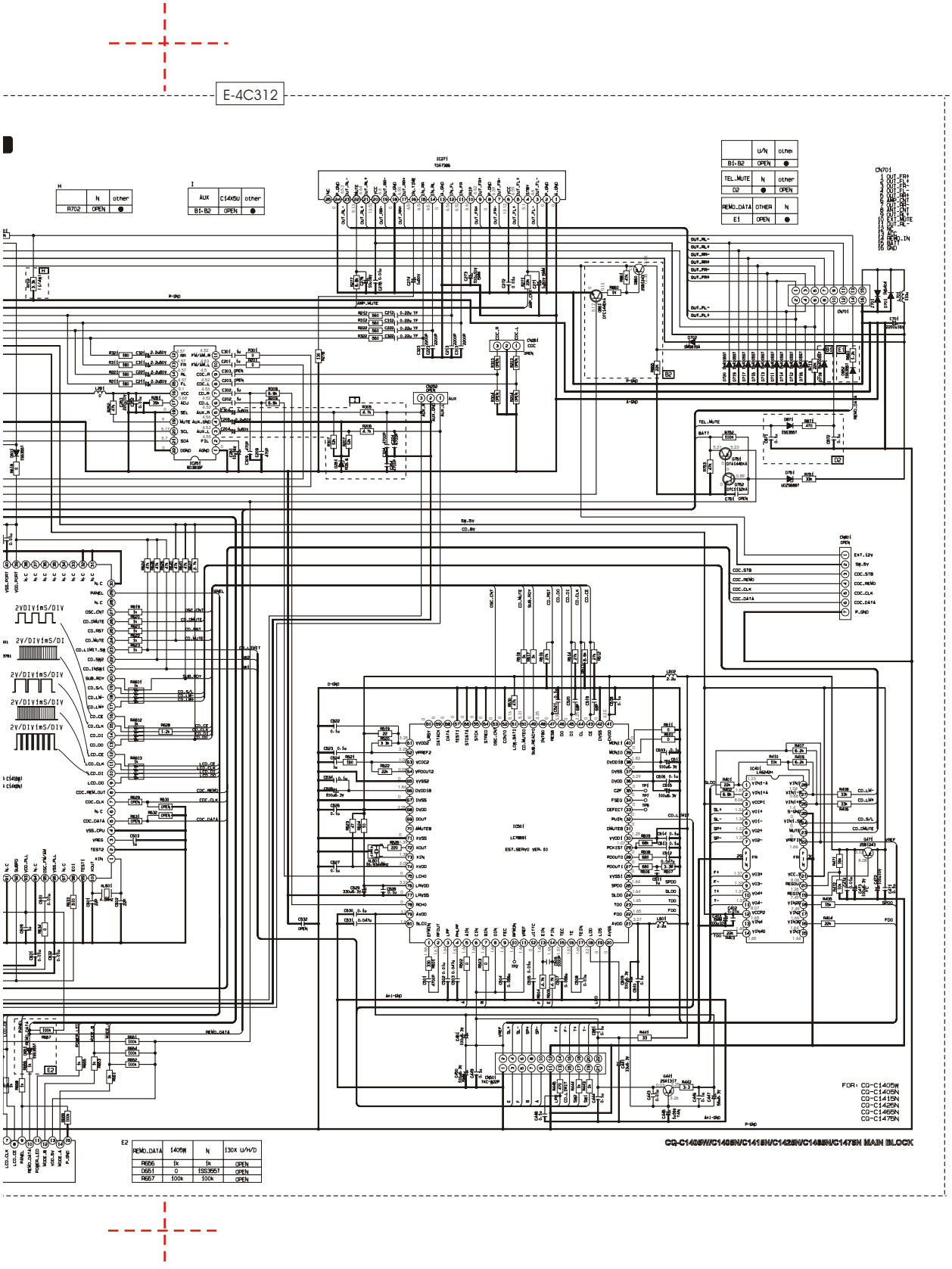


19 SCHEMATIC DIAGRAM for printing with A4 size

19.1. Main Block (Left Side)



19.2. Main Block (Right Side)



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